

*1631.5
C272*

**The CAROLINA
FARMER**

Electric
Farming
Edition
January, 1967

JAN 11 1967



★ ★

**North Carolina
FARM MATERIALS
HANDLING EXPOSITION**

~

J.S. Dorton Arena • State Fairgrounds
January 18-19, 1967 • Raleigh, North Carolina

★ ★

Need More Hours in a Day?

Mechanized Farming Is The Answer

If your days aren't long enough, we may be able to help you find out how to stretch them. Modern equipment can give you those priceless extra hours—hours which can be spent in far more profitable ways than carrying feed and water.

The advertisers listed below will be showing their products at the North Carolina Farm Materials Handling Exposition in Raleigh January 18 and 19. We invite you to attend if you can. If you can't, and would like to know more about mechanized farming, fill out the coupon below. We'll see to it that the right people find out about your interest in their products. And the power use director at your local co-op can give you advice on mechanizing your farm. Stop by and see him.



To: Power Use Editor
THE CAROLINA FARMER
Box 1699
Raleigh, N. C.

Please send me more information on the equipment advertised in this issue by:

Florence-Mayo Company (page 16)
Garber & Moseley, Inc. (page 20)
Goulds Pumps (page 19)
Guideway Industries, Inc. (page 17)
Johns Equipment Company (page 14)
Johnson Manufacturing Company (page 14)
Long Manufacturing Company (page 17)
McGraw Edison (page 20)
Revelle Builders (page 15)

**Check those
you would like
information on**

I would like information on this specific product _____

Name _____
Address _____
City _____

Planting Instructions included in each order. Every plant will be labeled.

Prices on Rose Bushes: .39 each, 6 for \$2.19 — 12 for \$3.98, your choice of varieties.

Red Radiance
Better Times
Crimson Glory
Poinsettia

TWO
TONES

President Hoover
Betty Uprichard
Edith N. Perkins
Contrast

CLIMBERS

Cl. Blaze Red
Cl. Red Talisman
Cl. Golden Charm
Cl. Poinsettia

YELLOWS

Eclipse
Golden Charm
Peace
Luxemburg

PINKS

Pink Radiance
The Doctor
Columbia
Picture

WHITES

K. A. Victoria
Caledonia
F. K. Ruskie
K. Louise

FLOWERING SHRUBS — 1 or 2 years Old

Crape Myrtle—Red, Purple, or
White, 1 to 2 ft.

Weigela—Red, or Yellow, 1 to 2 ft.

Weigela—Variegated or Weigela
Pink, 1 to 2 ft.

Spiraea Van Houttie—White, 1 to 2 ft.

Althea—Red, Purple, or White, 1 to 2 ft.

Forsythia—Yellow, 1 to 2 ft.

Pink Spirea, 1 to 2 ft.

Pink Flowering Almond, 1 to 2 ft.

Tamerix—Pink Flowers, 1 to 2 ft.

Bush Honeysuckle—Red or Pink, 1 to 2 ft.

Red Flowering Quince, 1 to 2 ft.

Persian Lilac—Purple, 1 to 2 ft.

Old Fashioned Lilac, 1 to 2 ft.

Bridal Wreath Spirea, 1 to 2 ft.

Hydrangea P. G., 1 to 2 ft.

Deutzia—White, 1 to 2 ft.

Mockorange—White, 1 to 2 ft.

Sweet Shrub, 1 to 2 ft.

Rose of Sharon—Mixed Colors, 1 to 2 ft.

Red Ozier Dogwood, 1 to 2 ft.

Pussy Willow, 1 to 2 ft.

Russian Olive, 1 to 2 ft.

Russian Olive, 2 to 3 ft.

Red Barberry, 1 to 2 ft.

Japanese Snowball, 1 to 2 ft.

Snowberry—Red or White, 1 to 2 ft.

Spiraea, Anthony Waterer Dwarf—
Red, 1/2 to 1 ft.

French Lilac—Red, White, or
Purple, 1 to 2 ft.

Scotch Broom, 1 to 2 ft.

Hypericum—Yellow, Collected, 1 to 2 ft.

Spice Bush, 1 to 2 ft.

Butterfly Bush—Purple, 1 to 2 ft.

Vitex—Purple, 1 to 2 ft.

Green Barberry, 1 to 2 ft.

Azalea—Red, White, or Pink, 1/2 to 1 ft.

Rose Acacia—Pink, Collected, 1 to 2 ft.

Red or Black Chokeberry, 1 to 2 ft.

Hydrangea Arborescence, Collected, 1 to 2 ft.

Spiraea Thunbergi, 1 to 2 ft.

Winter Honeysuckle, 1 to 2 ft.

Arrowwood Viburnum, 1/2 to 1 ft.

Beauty Berry, Collected, 1 to 2 ft.

FLOWERING TREES — 1 or 2 years Old

Magnolia Grandiflora, 1/2 to 1 ft.

Magnolia, Niagara, 1 to 2 ft.

Mimosa—Pink, 3 to 4 ft.

Mimosa—Pink, 4 1/2 to 6 ft.

American Red Bud, 2 to 3 ft.

American Red Bud, 4 to 6 ft.

White Flowering Dogwood, Collected, 2 ft.

White Flowering Dogwood,
Collected, 4 to 6 ft.

Pink Flowering Dogwood, 2 ft.

Pink Flowering Dogwood, 3 to 5 ft.

Golden Chain Tree, 1 to 2 ft.

Golden Rain Tree, 1 to 2 ft.

Smoke Tree, 1 to 2 ft.

Purple Leaf Plum, 2 1/2 to 4 ft.

Flowering Peach—Red, or Pink, 2 1/2 to 4 ft.

Double Pink Flowering Cherry, 3 1/2 to 5 ft.

Flowering Crab—Red, or Pink, 2 to 3 ft.

Chinese Red Bud, 1 to 2 ft.

Tree of Heaven, Collected, 3 to 5 ft.

Dwarf Red Buckeye, 1/2 to 1 ft.

Magnolia, Soulangeana, 1 to 2 ft.

Pink—Weeping Peach, 2 1/2 to 4 ft.

Red—Weeping Peach, 2 1/2 to 4 ft.

White Fringe, Collected, 2 to 3 ft.

Japanese Flowering Cherry—Dbl.
White, 3 to 5 ft.

European Mountain Ash, 3 to 4 ft.

Pauls Scarlet Hawthorn—Red
Blooms, 3 1/2 to 5 ft.

Big Leaf Cucumber Tree, Collected,
3 to 4 ft.

Paw Paw, Collected, 3 to 5 ft.

White Sumac, Collected, 2 to 3 ft.

Sourwood, Collected, 2 to 3 ft.

Yellow Buckeye, 1 to 2 ft.

Downy Hawthorn, 1/2 to 1 ft.

Dwarf White Buckeye, 1/2 to 1 ft.

Red Flowering Dogwood, 2 ft.

Red Flowering Dogwood, 3 to 4 ft.

SHADE TREES — 1 or 2 years Old

Silver Maple, 3 to 4 ft.

Silver Maple, 4 to 6 ft.

Weeping Willow, 2 to 3 ft.

Weeping Willow, 4 to 6 ft.

Chinese Elm, 3 to 4 ft.

Catalpa Fish Bait Tree, 2 to 3 ft.

Ginkgo Tree, 1 to 2 ft.

Pin Oak, Red Oak or Scarlet Oak, 3 to 5 ft.

Lombardy Poplar, 1 to 2 ft.

Lombardy Poplar, 3 to 4 ft.

Lombardy Poplar, 4 to 6 ft.

Faassen Red Leaf Maple, 3 1/2 to 5 ft.

Sycamore, 3 to 4 ft.

Sugar Maple, Collected, 3 to 5 ft.

Sweet Gum, Collected, 2 to 3 ft.

White Birch, 2 to 3 ft.

White Birch, 4 to 6 ft.

Crimson King Maple (Pat. No. 735),
3 1/2 to 5 ft.

Tulip Tree, Collected, 3 to 5 ft.

Sunburst Locust (Pat. No. 1313), 4 1/2 to 6 ft.

Schwedler Maple, 3 1/2 to 5 ft.

Cutleaf Weeping Birch, 3 to 5 ft.

Silver Variegated Maple, 3 1/2 to 5 ft.

Kentucky Coffee Tree, 1/2 to 1 ft.

American Linden Tree, 3 to 4 ft.

Skyline Locust (Pat. No. 1619), 4 1/2 to 6 ft.

Sassafras, Collected, 2 to 3 ft.

Scarlet Maple, Collected, 4 to 5 ft.

Yellow Wood, 3 to 4 ft.

Willow Oak or White Oak, Col., 2 to 3 ft.

Russian Mulberry, 2 to 3 ft.

China Berry, 2 to 3 ft.

Sycamore Maple, Purple Leaves, 1/2 to 1 ft.

Black Gum, Collected, 2 to 3 ft.

American Elm, Collected, 3 to 4 ft.

Japanese Red Leaf Maple, 1 ft.

FRUIT TREES — 1 or 2 years Old

Belle of Georgia Peach, 2 to 3 ft.

Belle of Georgia Peach, 3 to 5 ft.

Elberta Peach, 2 to 3 ft.

J. H. Hale Peach, 2 to 3 ft.

Hale Haven Peach, 2 to 3 ft.

3 to 5 ft.

Dixie Red Peach, 2 to 3 ft.

Golden Jubilee Peach, 2 to 3 ft.

Golden Jubilee Peach, 3 to 5 ft.

Champion Peach, 2 to 3 ft.

Stayman Winesap Apple, 2 to 3 ft.

Stayman Winesap Apple, 4 to 6 ft.

Red Delicious Apple, 2 to 3 ft.

Red Delicious Apple, 4 to 6 ft.

Yellow Delicious Apple, 2 to 3 ft.

Yellow Delicious Apple, 4 to 6 ft.

Early Harvest Apple, 2 to 3 ft.

Early Harvest Apple, 4 to 6 ft.

Red Rome Beauty Apple, 2 to 3 ft.

Red Rome Beauty Apple, 4 to 6 ft.

Red Jonathan Apple, 2 to 3 ft.

Red Jonathan Apple, 4 to 6 ft.

Lodi Apple, 2 to 3 ft.

Montmorency Cherry, 2 to 3 ft.

Montmorency Cherry, 4 to 5 ft.

Black Tartarian Cherry, 2 to 3 ft.

Kieffer Pear, 2 to 3 ft.

Orient Pear, 2 to 3 ft.

Bartlett Pear, 2 to 3 ft.

Apricots—Moorpart or Early
Golden, 2 to 3 ft.

5-N-1 Apple—5 Varieties on each
tree, 3 to 4 ft.

Nectarine, 2 1/2 to 4 ft.

Damson Plum, 2 1/2 to 4 ft.

Red June Plum, 2 1/2 to 4 ft.

Methley Plum, 2 ft.

Burbank Plum, 2 ft.

DWARF FRUIT TREES — 1 or 2 years Old

Dwarf Elberta Peach, 2 to 3 ft.

Dwarf Red Haven Peach, 2 to 3 ft.

Dwarf Belle of Georgia Peach, 2 to 3 ft.

Dwarf Golden Jubilee Peach, 2 to 3 ft.

Dwarf Red Delicious Apple, 2 to 3 ft.

Dwarf Yellow Delicious Apple, 2 to 3 ft.

Dwarf Winesap Apple, 2 to 3 ft.

Dwarf Montmorency Cherry, 2 to 3 ft.

Dwarf North Star Cherry, 2 to 3 ft.

Dwarf Bartlett Pear, 2 to 3 ft.

Dwarf Kieffer Pear, 2 to 3 ft.

Dwarf Plum—Blue, 2 to 3 ft.

VINES — 1 or 2 years Old

Red Scarlet Honeysuckle, 1 ft.

Wisteria, Purple, 1/2 to 1 ft.

Bitter Sweet, 1 ft.

Pink Radiance
The Doctor
Columbia
Picture

WHITES

K. A. Victoria
Caledonia
F. K. Ruskie
K. Louise

Clematis Vine, Collected, White, 1/2 to 1 ft.

Grape Vines, Concord or Niagara, 1/2 to 1 ft.

Grape Vines, Luttie or Fredonia, 1/2 to 1 ft.

Trumpet Creeper, Collected, 1/2 to 1 ft.

Yellow Jasmine, 1/2 ft.

Vinca Minor, Clumps, Collected

Halls Honeysuckle, 1 ft.

English Ivy or Boston Ivy, 4 to 8 inches

Euonymus Coloratus, 1/2 to 1 ft.

NUT TREES — 1 or 2 years Old

Hazel Nut, 1 to 2 ft.

Butter Nut, 1 to 2 ft.

Chinese Chestnut, 1 to 2 ft.

3 to 5 ft.

Hardy Pecan Seedlings, 1 to 2 ft.

Stuart Pecans, Paper Shell, 3 1/2 to 5 ft.

Black Walnut, 1 to 2 ft.

English Walnut, 2 to 3 ft.

Shell Bark Hickory, 1 to 2 ft.

American Beech, Collected, 3 to 4 ft.

EVERGREENS — 1 or 2 years Old

Glossy Abelia, 1/2 to 1 ft.

American Holly, Collected, 1/2 to 1 ft.

Rhododendron, Collected, 1/2 to 1 ft.

Pfitzer Juniper, 1/2 to 1 ft.

Cherry Laurel, 1/2 to 1 ft.

Nandina, 1/2 to 1 ft.

Boxwood, 1/2 ft.

Irish Juniper, or Savin Juniper, 1/2 to 1 ft.

Red Berry Pyracantha, 1/2 to 1 ft.

Burfordi Holly, 1/2 to 1 ft.

Wax Leaf Ligustrum

Colorado Blue Spruce, 1/2 to 1 ft.

Mountain Laurel, Collected, 1/2 to 1 ft.

Canada-Hemlock, Collected,
1/2 to 1 ft.

Short Leaf Pine, Collected, 1 ft.

Christmas Ferns, Collected

Red Cedar, Collected, 1/2 to 1 ft.

Hetzi Holly, 1/2 ft.

Japanese Holly, 1/2 ft.

Foster Holly, 1/2 to 1 ft.

Yellow Berry Pyracantha, 1/2 to 1 ft.

Andorra Juniper, 1/2 to 1 ft.

Cedrus Deodara, 1/2 to 1 ft.

Japanese Yew, Taxus Spreading, 1/2 to 1 ft.

East Palatka Holly, 1/2 to 1 ft.

Baker Arborvitae, 1/2 to 1 ft.

Berckman's Arborvitae, 1/2 to 1 ft.

Globe Arborvitae, 1/2 ft.

Greek Juniper, 1/2 to 1 ft.

Gardenia, White Blooms, 1/2 to 1 ft.

Camellia Sasanqua, 1/2 to 1 ft.

Norway Spruce, 1/2 to 1 ft.

Euonymus Radicans, 1/2 to 1 ft.

Chinese Holly, 1/2 to 1 ft.

White Pine, 1 ft.

Austrian Pine, 1/2 to 1 ft.

Mugho Pine, 1/2 ft.

BERRY PLANTS, ETC. — 1 or 2 years Old

Black Raspberry, 1/2 to 1 ft.

Red Everbearing Raspberry, 1/2 to 1 ft.

Dewberry, 1/2 to 1 ft.

Figs, 1 to 2 ft.

Boysenberry, 1/2 to 1 ft.

BULBS, PERENNIALS — 1 or 2 years Old

Pampas Grass, White Plumes

Hibiscus, Mallow Marvel

Hollyhocks, Mixed Colors, Roots

Cannas, Colors, Red, Pink, or Yellow

Iris, Blue, Roots Collected

Day Lillies, Roots Orange Flowers, Collected

Creeping Phlox, Pink or Blue

Blue Bells, Roots Collected

Maiden Hair Fern, Roots Collected

Fancy Leaf Caladium, Red or White

Gladiolus, Pink, Red, White

BERRIES, FRUITS AND HEDGE PLANTS
— 1 or 2 years Old

10 Rhubarb, 1 Yr. Roots

10 Asparagus, 1 Yr. Roots

50 Strawberry—Blakemore or Tenn. Beauty

50 Gem Everbearing Strawberry

100 South Privet, 1 to 2 ft.

25 North Privet, 1 to 2 ft.

25 California Privet, 1 to 2 ft.

25 Multiflora Rose, 1 to 2 ft.

Our plants are Nursery grown from cuttings, seeds, or budded stock unless otherwise stated. These have never been transplanted. Inspected by the Tennessee Dept. of Agriculture. This gives you a chance to buy at low grower prices. SATISFACTION GUARANTEED ON ARRIVAL OR WE WILL EITHER REPLACE OR REFUND YOUR MONEY. You may order as many or as few plants as you wish. Send .60 cents extra with order for postage and packing. NOTICE FREE Orders in the amount of \$3.00 or more you get 2 flowering shrubs FREE, our choice. Orders in the amount of \$5.00 or more you get 4 flowering shrubs FREE, our choice. ORDER NOW.

P. O. Box 125-CF, McMinnville, Tennessee 37111

Richard A. Pence
Editor

Archie Hathcock
Power Use Editor
and Advertising Director

Rebekah Rivers
Carolina Homemaker Editor

Brenda Lewis
Editorial Assistant

Official Publication
Tarheel Electric
Membership Association
P. O. Box 1699 • Raleigh, N. C.
J. C. Brown Jr.
Executive Manager



Dan Moore

In this age of great change, it is entirely appropriate that our people in agriculture be kept informed of the latest, most modern labor-saving equipment and systems.

As Governor, I am pleased to recommend that you attend the North Carolina Farm Materials Handling Exposition at Dorton Arena on the State Fairgrounds at Raleigh.

This display of equipment and systems is a worthwhile effort and I believe it will be very helpful in stimulating a greater interest in profitable agricultural mechanization.

DAN K. MOORE
Governor of
North Carolina



James A. Graham

The Farm Materials Handling Exposition is a fine, forward-looking program for North Carolina. Last year's Exposition was an outstanding success, definitely indicating the needs of our people and the positive thinking being brought to bear in meeting those needs.

I heartily endorse the Exposition and look forward with eager anticipation to the event this year.

JAMES A. GRAHAM
Commissioner of
Agriculture



Your invitation to the North Carolina Farm Materials Handling Exposition



H. Brooks James

The School of Agriculture and Life Sciences at North Carolina State University is happy to support the second North Carolina Farm Materials Handling Exposition for two reasons.

First, we know what a great contribution the first exposition made to our agricultural and agribusiness economy. Second, we anticipate an acceleration of the present trend in farm mechanization and automation. Farmers need the types of information that can be gained at the Exposition as they begin to select equipment and systems for the future.

H. BROOKS JAMES
Dean of Agriculture
and Life Sciences

COVER—The cover sets the pace for this month's issue. As it notes, the North Carolina Farm Materials Handling Exposition will be held Jan. 18-19 at the J. S. Dorton Arena at the State Fairgrounds in Raleigh. Our magazine is largely devoted to telling you about the show.

This month . . .

- 5 TARHEEL RURAL LINES
By J. C. Brown Jr.
- 7 THE FRONT PORCH
Heat by light
- 8 FARM MATERIALS SHOW
Your complete guide
- 10 MAINLAND POWER
Goes to islands
- 11 AUTOMATED FARMING
Keeps costs down
- 12 LEGISLATION
What's ahead?
- 21 LETTERS
We hear from readers
- 22 PASSING SCENE
People and events
- 23 AROUND THE HOUSE
The right appliance
- 24 THE CAROLINA HOMEMAKER
Kitchen convenience
- 29 THE TEEN PANEL
Talk about teachers
- 30 HALE!
Laughs by Brenda

THE CAROLINA FARMER IS PUBLISHED MONTHLY BY TARHEEL ELECTRIC MEMBERSHIP ASSOCIATION, INC. SECOND CLASS POSTAGE PAID AT MEMPHIS, TENN. 38118. EDITORIAL OFFICES, SUITE 911, BRANCH BANK BUILDING, RALEIGH, N. C. 27601. POSTMASTER, SEND FORM 3579 TO BOX 1699, RALEIGH, N. C. 27602. SUBSCRIPTION PRICE 66 CENTS PER YEAR. PUBLISHED MONTHLY AT 3781 LAMAR AVE., MEMPHIS, TENN. 38118. CONTENTS COPYRIGHTED 1967 BY TARHEEL ELECTRIC MEMBERSHIP ASSOCIATION, INC.



TARHEEL RURAL LINES

reports on events of importance to rural electric co-op members/by J.C. Brown Jr.

N.C. MOES OWES LEGISLATORS FACTS, NOT FICTION

IF THE TOWNS in the power business are serious about attempting to destroy the landmark utilities legislation adopted by the 1965 General Assembly, they'd do well to find out what the law was and is. Frequently since 1965, the N. C. Municipally Owned Electric Systems (N. C. MOES) have held meetings from which have issued news stories badly misrepresenting the facts.



ERROR NO. 1

Following a meeting called by the N. C. MOES Nov. 1 at Rocky Mount, and attended by about 20 legislators, an Associated Press story reported that "the law (adopted in 1965) has the effect of prohibiting municipalities from providing service to electric power customers not already served before its passage."

That is but one of the several recurring errors of fact; if it were fact, we'd agree the law was unfair and unwise public policy. But there is nothing in the 1965 Act that prevents the towns from serving new customers. An accurate statement is that the law tends to keep the town from taking away the customers of the co-op or power company and vice versa.

The 1965 Act actually protects the towns from having their electric facilities duplicated by a competitor. Before the General Assembly enacted it, the N. C. Supreme Court had ruled that the towns could not keep the cooperatives from serving anywhere in a town of under 1,500. Cooperatives and power companies are now restricted to serving consumers served at time of annexation plus new loads within 300 feet of their lines as they exist upon annexation.



ERROR NO. 2

The same news story quoted a lobbyist for the N. C. MOES to the effect that he would ask the General Assembly "to restore to the cities the right of franchisement of every public utility within corporate limits, and the right to acquire the facilities within the limits for a fair price based on a fair formula."

(Continued on next page)

TARHEEL RURAL LINES

reports on events of importance to rural electric co-op members/by J.C. Brown Jr.

(Continued from page 5)

The word "restore" is an inexcusable attempt to mislead the legislators, the press and the public. The 1965 Act did not diminish the franchising authority of the cities, and the constitution of North Carolina prohibits the granting of exclusive franchises. Nor have the towns ever had the right to command the sale of cooperative or power company facilities.

As a matter of practicality, before the 1965 Act, the cooperative could not sell its facilities. Legally, such a sale would have required a majority vote of all the members—not just a majority of a quorum present at an annual meeting. The new law eased the requirement, so that based upon a willing buyer and willing seller, the co-ops now have the realistic ability to sell or swap certain of their properties.



ERROR NO. 3

The third error or, more accurately, unsupportable charge, in the news story is the lobbyist's quote that "if the Act is not amended, the end of municipal electric systems is closer than you think."

The towns' spokesmen have never pointed out what in the legislation could spell the end of the municipal electric systems. It is interesting that the spokesman making the charge was a member of the General Statutes Commission which recommended to the General Assembly in 1963 that the cooperatives be sold out to the power companies without a vote of the members. His current goal is just as fair as that proposition, which the legislature turned down four years ago.



THE REAL GOAL OF THE N. C. MOES

These three errors have been repeated and reported in the newspapers across the state, and served as the basis for a recent editorial in the *Gastonia Gazette*. The unsuspecting editor made the mistake of accepting the lobbyist's word for what the law is, rather than reading it. His logic was clear, but he developed it from an erroneous base.

The actual goal of the N. C. MOES is to obtain an authority they have never had: That is, to condemn a going business and operate it themselves for the profit of the towns.

The N. C. MOES may have some arguments in behalf of the public granting it the unusual privilege it seeks, but its spokesmen owe it to the lawmakers to be factual in what the law actually is, concede that they are seeking a new and rare privilege, and argue their case on those grounds.

THE FRONT PORCH



by Dick Pence

Most of us would get pretty cold this winter if the only heat we had came from the light fixtures in our homes or where we work. But that's exactly how the folks in Broyhill Furniture Industries' new offices and showroom building at Lenoir are keeping warm. They're doing fine in a structure heated almost entirely by the lights.

I looked over this unusual setup late in November when Blue Ridge EMC, which serves the Broyhill building, presented the company with a special Total Electric Building Award.

With the exception of a few space heaters in exposed areas, the heat for the building is provided capably by overhead light fixtures. The windowless structure has 138,000 square feet of space on three floors, including a 43,000-square-foot showroom on the top floor. That makes the showroom just one living room smaller than an acre (an acre is just a bit smaller than a football field). This whole floor is heated solely by 1,200 150-watt recessed ceiling lights.

Lights in the building are left on continuously. Not only does this keep the heat level up, it also prolongs the life of the lights. On warm days, the building is cooled by a 247.5-ton air-conditioning

system that can pour 50,000 BTUs of cool air through the building's perforated ceilings each minute.

(In case you're wondering, a BTU—British Thermal Unit—is the amount of energy required to heat or cool one pound of water one degree Fahrenheit. Since a gallon of water weighs 8.33 pounds, the 50,000-BTU air-conditioning unit would cool about 6,000 gallons of water one degree each minute. Six thousand gallons would be enough to put about a quarter-of-an-inch of water on each of the Broyhill showroom's 43,000 square feet. If the water were at normal room temperature—68 degrees—it would take the air conditioning unit 36 minutes to freeze it solid if its energy were properly directed. That's precisely half the time it took me to figure all this out.)

Broyhill officials say that lower investment, lower operation and maintenance costs, greater freedom for space utilization and more accurate controls for desired comfort levels were some of the major factors which influenced their decision to use a heat-by-light system.

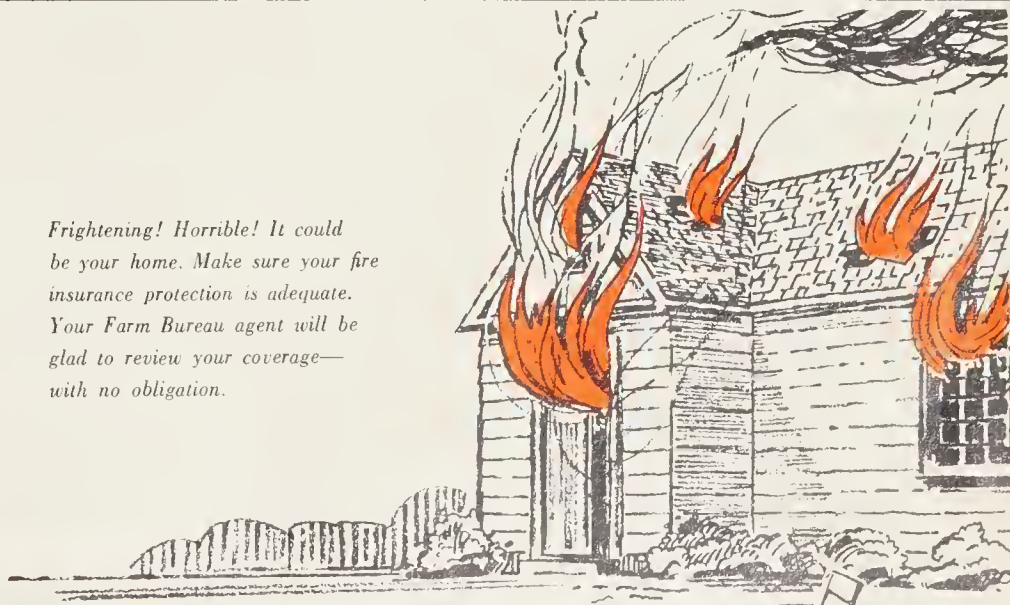
Any problems? Just one so far. Paul Broyhill, president of the company, revealed it after accepting the award from Blue Ridge Manager Cecil Viverette.

"The big problem is trying to keep my father from going around and shutting off the lights in offices when no one is working in them," said Broyhill.

The younger Broyhill admits it may be a lot to expect his father to adjust to this apparent waste of light. After all, just 40 years ago J. E. Broyhill started his own furniture business in the basement of his home. Saving on light bills must have been just one thing that helped him to build the company to its present size.

FIRE!
FIRE!
FIRE!

Frightening! Horrible! It could be your home. Make sure your fire insurance protection is adequate. Your Farm Bureau agent will be glad to review your coverage—with no obligation.



NORTH CAROLINA

FARM

BUREAU

Insurance



N. C. Farm Bureau Insurance
Box 1391
Raleigh, North Carolina

CF-1-67

Please send information about Farm Bureau Insurance coverage to:

Name _____
Address _____

North Carolina FARM MATERIALS HANDLING EXPOSITION



J. S. Dorton Arena • State Fairgrounds
January 18-19, 1967 • Raleigh, North Carolina

Your Guide to the Show!

Here's your complete guide to this year's North Carolina Farm Materials Handling Exposition. If you're planning on attending the show, take this issue along with you. You'll find it a big help in locating the particular products you're interested in.

Literally hundreds of labor-saving, money-saving ideas will be on display in the J. S. Dorton Arena during the two-day show. Representatives of manufacturers will be there to help you with your individual problems. Come to the show and bring your questions with you.

THE DATES: Wednesday and Thursday, Jan. 18-19, 1967.

THE TIMES: Jan 18—9:30 a.m. to 6 p.m.; Jan. 19—9 a.m. to 5 p.m.

THE PLACE: J.S. Dorton Arena State Fairgrounds, Raleigh.

ADMISSION: Free

SPONSORS: N.C. State University at Raleigh and the electric power suppliers of the state (including your electric cooperative), in cooperation with other agricultural agencies and groups.

TRANSPORTATION: Being arranged locally by power suppliers, banks, county extension offices. Check with your

local electric co-op to see if transportation is available from your community.

EXHIBITORS: Listed below, along with a brief description of products being shown and booth numbers (see diagram, page 18).

A & B Milling Company: Nursett products. Booth A-3.

* * *

Advance Metalworking Company: Farrowing crates, stock tanks, tank heaters, infra-red heaters, pig blankets. Booth C-7.

* * *

American Plywood Association: Softwood plywood as it is used in pallet bins, pallets, crates, shelving. Booth C-8.

* * *

Babson Bros. Company: Milking parlor stall, feed handling system, automatic door opener. Booths C-46, C-47, C-48.

* * *

John Blue Company: Automatic mill, augers, Booth C-40.

* * *

Bradshaw Supply Company: Egg cooler, auger feeder and fill system, automatic feeder, hog feeder, gas brooder, hen nest waterers, hanging feeder. Booth C-53.

* * *

Carolina Silo Company: Silo unloader and feeder. Booths C-10, C-11.

* * *

Ceilheat, Inc.: Electric heaters. Booth A-4.

* * *

Clay Equipment Corporation: Silo unloader, mechanical feeder, 400 feed meter, honey wagon, circulating waterer for swine and cattle, farrowing crate and sow feeding stall. Booth C-21.

* * *

Cuckler Buildings: Buildings. Booth C-34.

* * *

Decatur Pump Company: Water pump. Booth C-32.

* * *

Dedmon's Livestock Yards: Harvestore products. Booths C-42, C-43, C-44.

* * *

DeLaval Separator Company: Vacuum pump, milk pump, timer converter, level control. Booth C-41.

* * *

Look on Page 18 for a diagram of booth placements at the J. S. Dorton Arena.



Clyde Eby, Inc.: Grain equipment for poultry. Booth C-16, C-17.

* * *

Engineered Farm Systems, Inc.: Mix-Mill feed preparation equipment. Booth C-9.

* * *

Farm Credit Banks of Columbia: Portable exhibit on farm credit. Booth A-2.

* * *

Farmec: Cycle feeder, trough feeder, silage distributor, silo unloader, vertical elevator. Booth C-55.

* * *

FCX: Decker grinder, mixer. Booth A-1.

* * *

Florence Mayo Company: Nuway barn unit—oil fired, jet oil fired curer, central heating system for broiler houses, electric brooder, gas brooder. The Nuway barn system is 100 percent automatic and the most scientific barn and curing system on the market. Cost of barn and curing system, including thermostat, timer and programmer is \$1,400. See the ad on page 16 for further details and check the reader service coupon on page 2 if you would like more information from Florence Mayo Company. Booths C-12, C-13.

* * *

G & M Sales of Eastern North Carolina, Inc.: Big Dutchman automatic feeder. Booths C-49, C-50.

* * *

Garber & Moseley, Inc.: Manure pump and spreader, silage feeders and unloader, livestock waterers and feeders. Featured will be the Fairfield Hi-6 Stock-O-Matic waterer which will serve 150 head of cattle and refills as they drink. For more information, see the ad on page 20. If you would like to receive additional details from Garber & Mosely, check the reader service coupon on page 2. Booth C-28.

* * *

Goulds Pump, Inc.: Water gun, electric utility pump. Goulds' factory representative for North Carolina, Max Price, will be on hand with the hit of last year's show—the high-pressure utility pump. The unit delivers six gallons of water per minute at 80 to 85 pounds of pressure. It draws water from any available source. Ideal for cleaning milk parlors, washing down barn floors and extra fire protection. Also on display will be Gould's economically priced gear pump, popular in North Carolina for tobacco seed

bed irrigation and other sprinkling jobs. For more information, write Max Price, Box 2752, Charlotte. Also, see the ad on page 19. If you wish additional details, you can check the reader service coupon on page 2 and we will pass along your request to Max Price. Booths C-5, C-6.

* * *

Guideway Industries, Inc.: On display will be a new idea in tobacco curing, a wire basket. Booth A-17.

* * *

Johns Equipment Company: Ritchie automatic electric-heated livestock waterers, Wade'Rain irrigation equipment, Aerovent crop dryers. Ritchie waterers provide animals temperature-regulated fresh water the way they like it—cool in the summer and ice-free in the winter. Johns Equipment will also display a complete line of Wade'Rain sprinkler irri-

W. D. Hines Company: Farrowing crates. Booth A-19.

* * *

John Deere: Farm materials handling equipment. Booth is at the east end of the Arena floor.

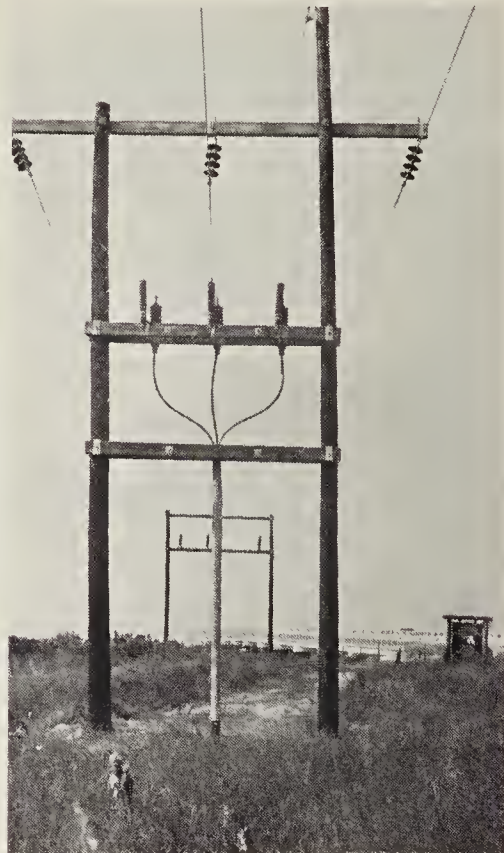
* * *

(Continued to page 14)

Power Flows From Mainland to Outer Banks



Part of the conduit under Herbert C. Bonner Bridge.



Wires go up for 35-mile Hatteras trip.

A complicated engineering feat has brought mainland electricity to two islands in North Carolina's Outer Banks. A combination of three miles of conduit, more than 50 miles of overhead transmission line and three miles of underwater cable now carries power across Oregon Inlet, down Hatteras Island, across Hatteras Inlet and on to Ocracoke Village.

For the first time, the members of both Cape Hatteras EMC and Ocracoke EMC are using electricity generated on the mainland. Before they had to depend on power generated by their own small and inefficient diesel units. The two tiny co-ops—Hatteras has about 900 members and Ocracoke about 325—have been handicapped for years because of the high cost of generating the small amount of electricity used on the two islands. In 1965, for instance, it cost Cape Hatteras EMC 2.2 cents per kilowatt-hour to generate its own electricity. Ocracoke's cost was even higher—2.6 cents. Now both buy at lower rates.

Cape Hatteras EMC is purchasing its power from Virginia Electric and Power Company at a rate of 7.5 mills per kilowatt-hour (a mill is a tenth of a cent). In turn, Hatteras is reselling to Ocracoke at a penny a KWH. The higher resale rate reflects added expenses for Hatteras for carrying the power the full length of Hatteras Island.

Even though the cost of power is lower for the two co-ops, retail rates may not drop right away. The gigantic job of getting power from the mainland was expensive.

For instance, it cost about \$230,000 to complete the four-month job of building the line across Oregon Inlet. A wrought-iron conduit under the Herbert H. Bonner Bridge—a three-mile span—carries the line. From the south edge of the bridge the transmission line travels overhead for 35 miles to Cape Hatteras EMC's generating station of Buxton. Then it is fed over the distribution system of the co-op to Hatteras Village. There Ocracoke EMC

takes over. Two miles of transmission line carries the power to Hatteras Inlet. A cable buried from three to eight feet under the inlet floor gets it the three miles across the inlet. Another 15 miles of overhead transmission line takes the electricity to Ocracoke Village.

In all, the job cost nearly a million dollars and almost doubled the plant investment of the two cooperatives. Besides the \$23,000 Cape Hatteras spent crossing Oregon Inlet, the co-op spent another \$450,000 for the 35-mile transmission line to Buxton. Ocracoke spent more than \$250,000 building the line from Hatteras Village across the inlet and on to Ocracoke Village.

The two co-ops are now examining their rate structures to see if reductions can be made in spite of the heavy investment needed to get the lower-cost mainland power. In any event, the achievement marks another step forward in the progress of the islands and their co-ops.

Automation: Saves Labor and Money

By Quinton Hussey, Randolph EMC

A new automatic feed mill is helping Bobby Ray Atkins keep his operating costs down. Atkins owns and operates a 479-acre dairy farm on Rt. 2, Troy. Another 50 acres is rented.

Atkins, his wife, plus one full-time helper and part-time help in the summer, are able to handle all of the work. Atkins says it would be impossible without the aid of electricity and his automated equipment.

The feed mill is a three-horsepower hammermill, with seven electric conveyors. It is housed in a specially built building with two-and-a-half-ton grain and concentrate bins elevated for gravity flow to the mill below. There also is a 4,200-bushel grain dryer near the feed mill. An electric conveyor moves the corn from the dryer to the grain bin when it is needed.

A two-inch conveyor runs 275 feet from his feed mill to his silos, where the feed is mixed "all electrically" with the silage and is fed to his cows. He is presently milking 84 cows of his total 169 herd.

Atkins uses almost a ton of feed per day in the summer and two tons per day in the winter. His new electric feed mill will pay for itself in a short while, with reduced feed and labor cost. It used to take



Electric Farming

almost a half day to do the feeding; now, it takes only about ten minutes to grind mix and distribute the feed to his cows.

Atkins' feed mill operation is almost completely automatic, with most of the work done by electric motors. He also has an electric premixer that mixes supplement, which is added to the crushed grain. This machine also saves money in feed costs.

The cost of feed often accounts for 55 to 65 per cent of the cost of livestock, poultry or dairy production. Feeding and processing has gone through quite a large number of changes in recent years. Most of these changes have been designed to reduce the cost of producing a salable unit of some commodity.

Some producers are using home grown or locally-purchased grain with a prepared supplement.

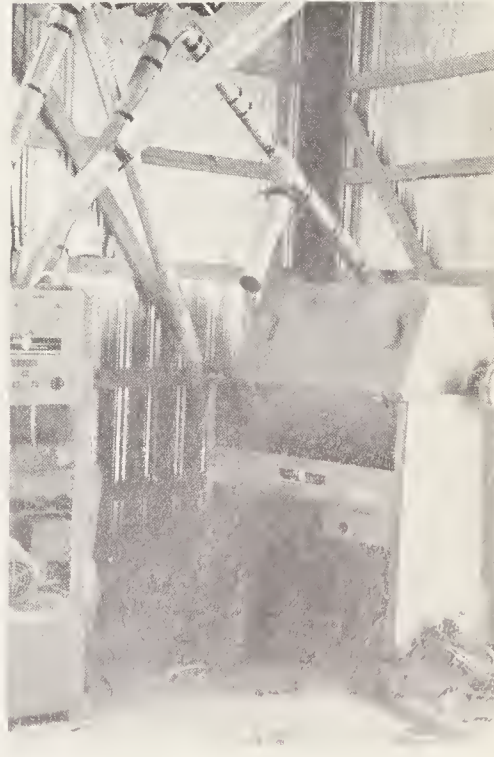
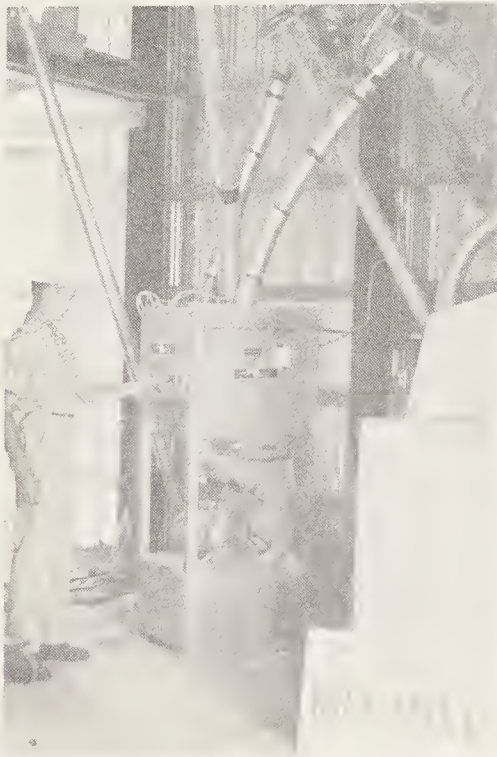
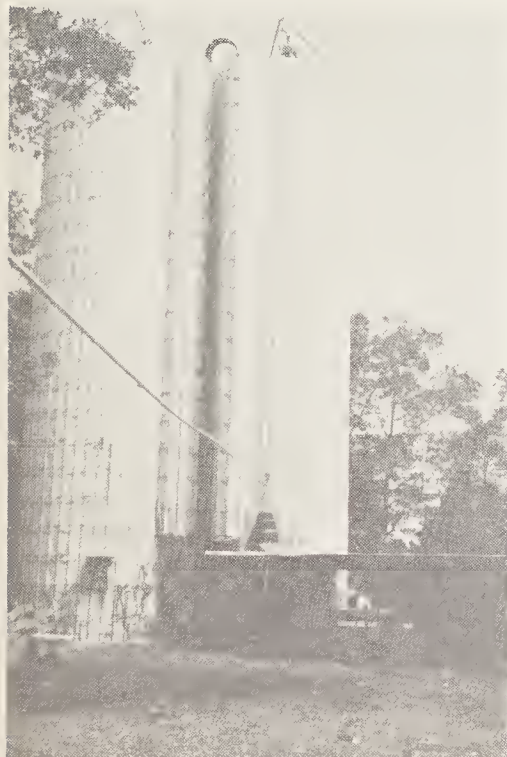
Those producers who are processing their own feed depend on buying their grain when the market price is low or buying it in large bulk quantities.

In the past, grinding and mixing ingredients in the right proportions to provide a balanced ration has been an undesirable, time-consuming job. Today, it is possible to obtain equipment for farm use that will grind, proportion and mix the feed with a minimum of supervision, labor and power.

It is no longer necessary to use large capacity mills, driven by a tractor for grinding feed on the farm. By using electrically driven units, requiring less horsepower, grinding cost is sharply reduced. This is true because fixed charges are less, labor is practically eliminated, and the final cost is cut to a minimum.

Small mills, requiring from one to three horsepower, are ideal for automatic operation. They require little wiring changes and do not require three-phase power.

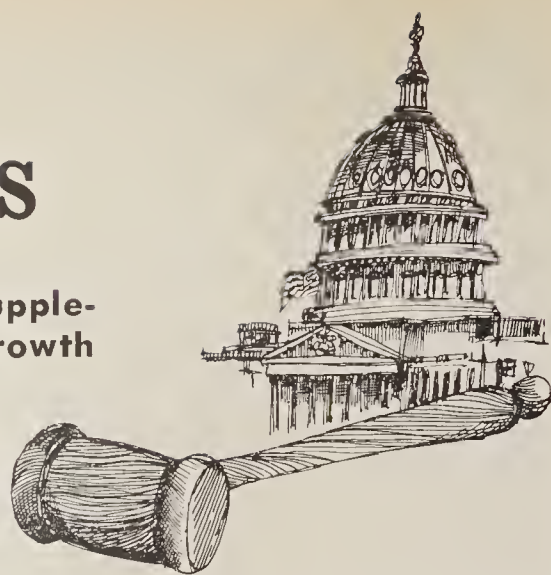
Automatic electric feed mills usually can save the farmer \$15 per ton on his feed cost. Feed mills are recommended if a farmer has 25 or 30 cows, or if he has 2,000 hens.



Scenes of the automated feeding operation of Bobby Ray Atkins (center), Randolph EMC member.

First Order of Business

... on the rural front in the 90th Congress will be "supplemental financing" legislation, a measure vital to the growth and prosperity of rural America.



When the new Congress convenes Jan. 20 the most pressing rural item on its agenda will be enactment of legislation to head off serious shortages of loan capital in the rural electrification program.

"Rural electric cooperatives must get financing from sources in addition to the present REA program. If they don't, then rural electrification will be on its last legs."

That's the conclusion of Clyde T. Ellis, general manager of the National Rural Electric Cooperative Association, and rural electric leaders generally.

As these leaders see the problem, their systems will need about \$9-billion in growth capital over the next 15 years, a projection backed by independent studies. Last year Congress authorized \$375-million for the REA loan program. If Congress continued to appropriate at an annual rate of \$375-million—which by no means is assured—that would total \$5.6-billion within 15 years.

The difference between the two figures is more than \$3-billion, the amount electric co-ops would lack in needed growth capital. The result of such a shortage would be serious: the scrapping of plans for necessary power supply systems; deletion of two-way feeds into substations; competition between co-ops for a portion of the inadequate supply of loan funds.

Ellis says this shortage would mean a general slow-down in rural electrification, weakened electric systems and, inevitably, "brown-outs" or "blackouts" in rural America.

Many leaders in Congress also see the need for "supplemental

financing" in the rural electrification program, and so does the Johnson Administration.

The last Congress wrestled with the financing problem for seven months but failed to come to an agreement on details before time ran out in the session.

Nevertheless, rural electric leaders hasten to point out that the seven months was time well spent. Congressmen are more aware of the needs of the rural electrification program now than they were before the first bill was introduced.

And lengthy hearings before the House Agriculture Committee plus countless hours of debate within the Committee led to a form of agreement on details to be included in a supplemental financing bill. This agreement was embodied in Committee Print No. 1 of H.R. 14000 and H.R. 14837, the final product of the 89th Congress.

Of course, this print, and all other supplemental financing bills, died with adjournment of the last Congress. A new bill will be introduced in the opening days of the session, and its provisions are expected to follow closely those in Committee Print No. 1.

While rural electric leaders did not view the last bill as ideal, they noted that many of its main points were basically those recommended in a resolution adopted by member systems at the last annual meeting of NRECA.

These essentials include the concepts of an "Electric Bank" to be capitalized initially with federal funds; the idea of eventual conversion of the bank to ownership and control by rural electric; and the recognition that bank funds

would be "supplemental" funds and are not meant to replace the two-percent interest, 35-year REA loan program.

The objective of the supplemental financing program is simple—it is designed to pool the collective credit of rural electric systems so they can borrow funds from non-federal sources.

Rural electric leaders generally, the Administration, and a number of members of last year's House Agriculture Committee agreed the best way to obtain these funds would be through the establishment of a banking set-up similar to that now in operation in the Farm Credit System.

Under this plan, as provided in Committee Print No. 1, the Federal government would invest \$50-million a year (from repayments on existing REA loans) over a 15-year period in a Rural Electric Bank for a total of \$750-million. Electric co-ops which borrow from the Bank would also invest in it and, as co-op capital increased, government funds would be repaid until all the government capital is retired. Co-ops would then own and control the bank.

This is the same proven method used in the Banks for Cooperatives of the Farm Credit System. Four out of the thirteen Banks for Cooperatives have repaid all the capital initially invested by the government.

As the Bank's capital is building, it would borrow money on the open market and re-lend it to electric co-ops. Interest rates would be pegged at no more than four percent for "intermediate" loans and cost-of-open-market money for the other loan, termed "de-

velopmental" loans.

These two types of loans would be made to the more financially mature systems. The present REA loan program would continue for the systems which must rely on these lower interest rate funds.

It is at this point where supplemental financing is expected to begin in the new Congress. And rural electric leaders are hopeful that since no other major rural legislation is in the offing, the supplemental financing bill will get off to a faster start than was the case last year.

NRECA's Ellis says the job ahead now for members of rural electric cooperatives is to keep constantly informed on the progress of the supplemental financing bill and to take an active part in a vigorous campaign for enactment of a sound financing program this year.

Ellis states that rural America has vast, yet undreamed-of contributions to make to the nation. There is a need, he says, for industrial sites in rural America and he points to urban America's desire for better recreation and more "breathing space."

The growth of rural America, he says, will require huge amounts of electric power—and someone will provide it. Power company executives, Ellis declares, failed to perceive the trend of the future when they refused service to rural America in the 1930's. But "it would be fatal for us to expect them to do so again."

The power company campaign against the financing bill last year "was conducted largely because of their knowledge that rural America has just barely begun to grow as a consumer of electric power."

And these companies, Ellis says, believe that "if they can keep (electric co-ops) away from a source of growth capital, then they can come in and take over our systems when our backs are against the financial wall.

"And if we fail to keep our systems strong and growing, the power companies will move in and take over the growing, thriving portions of our service areas and let the rest die."

That is why co-op people must prepare for and take an active role in the up-coming battle for enactment of a sound supplemental financing program.

YOU

And Rural Electric Financing

Just how serious is the need for new capital in the rural electric program? And what does it mean to you as a member of an electric co-op?

Unfortunately, the need for new sources of capital for electric co-ops is extremely urgent. And if a way isn't found to provide capital at interest rates co-ops can afford, it will hit you where it really hurts—your pocketbook.

You don't have to be much of a mathematician to reach these conclusions. The need for capital can be easily demonstrated. For instance, take the example provided by an official of Duke Power Company. In a recent article, the official pointed out that—after 60 years of operation—the company now has passed the \$1-billion mark in plant investment. How long will it take Duke to pass the \$2-billion mark? Another 30 years? Hardly. Duke expects to have \$2-billion invested in ten short years. And in another five it will pass the \$3-billion level!

Electric use by co-op members—especially since World War II—has been doubling every five to seven years. As a rule of thumb, every time usage doubles the amount invested in plant must be increased to one-and-a-half times its former size.

The problem facing one North Carolina co-op graphically demonstrates the need for capital funds. This co-op—now 30 years old—has a total plant investment of something over \$16-million. Its members used electricity this past year at a rate 20 percent above 1965. If this growth rate continues—and it likely will—it means that the co-op will double its sales in three-and-a-half to four years. In another 18 months to two years its members will be using three times as much electricity as they now are. Applying the rule of thumb, we find that in the next five or six years the co-op will need as much capital—\$16-million—as it needed the first 30 years it was in business! And the next few years after that will see a need for that much again.

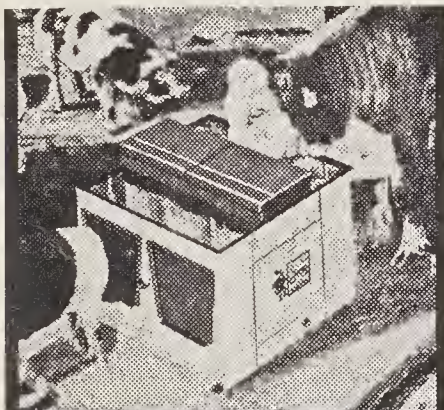
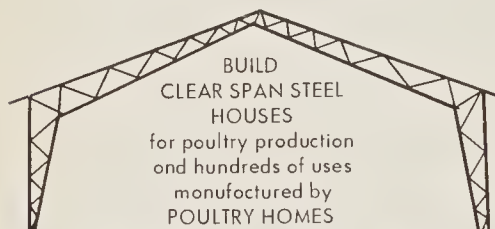
The reason that new sources of capital are being sought is that there seems little likelihood that Congress will appropriate anything like the kind of money needed to meet growth of the electric co-ops. It took 30 years for Congress to appropriate \$5-billion for rural electric loans. It's folly to think it will appropriate nearly twice that much in the next 15 years.

If new sources of capital—at reasonable rates of interest—are not found, one result is obvious: Electric co-ops will not be able to meet the power demands of their members. The only way they will be able to operate will be on a principle of "scarcity." Instead of providing electricity at low rates to promote greater usage and efficiency, they will have to raise rates high enough to discourage use.



Electric Farming

(Continued from page 9)



EXTRA CATTLE & HOG PROFITS OF \$3,047!

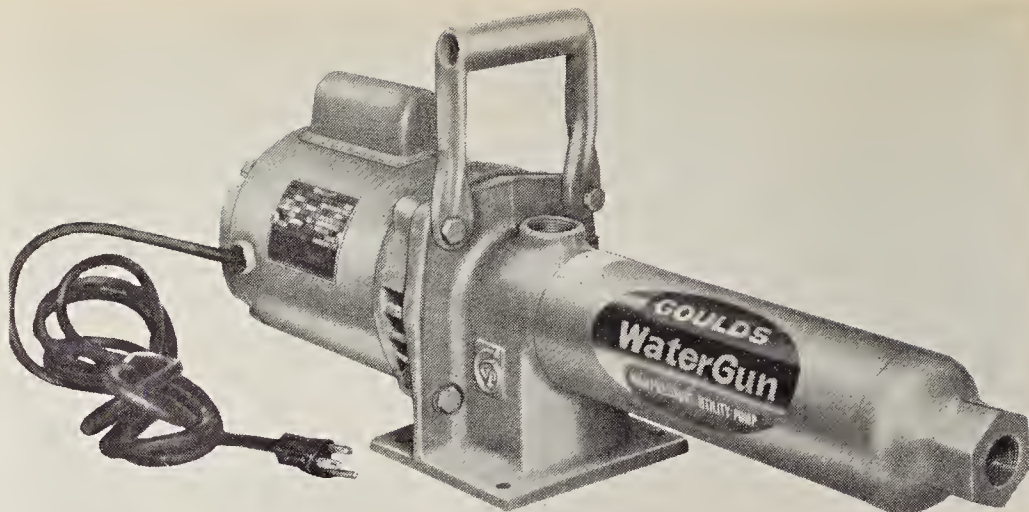
New "Thrifty Ritchie" Livestock Book Shows How

\$3,047 extra profits on 100 head of cattle and 200 hogs! Yes, extra profits like these are actually being realized on many modern livestock farms today—when animals get a balanced water ration. Ritchie's new livestock book shows how fresh, clean water, available when animals need it, is the key to peak efficiency in the conversion of feed to meat. "Thrifty Ritchie" Waterers work 24 hours a day—automatically. No winter freeze-ups . . . no ice chopping . . . no sun-drenched, stagnant water supply. Remember, water is your cheapest feed! Give your animals temperature-regulated fresh water the way they like it—cool in summer and ice-free, pipeline-temperature in the winter—from quality Ritchie Waterers. Your choice of 72 different waterers in 22 models. Our exclusive business since 1921.

Special discount on orders given us of Farm Materials Exposition in Raleigh on January 18th and 19th.

Visit our display on these Ritchie Waterers and Wade'Rain Irrigation in Raleigh on January 18th and 19th.

Distributed by
JOHNS EQUIPMENT CO.
Farmville, Virginia



This pressure pump will be on display in booths C-5, C-6.

gation equipment. Wade'Rain is a name well known to farmers in North Carolina. Special discounts will be given on orders taken during the Farm Materials Handling Exposition. See the ad on page 14. For more information, check the reader service coupon on page 2. Booths C-35, C-36, C-37.

Johnson Manufacturing Company: Sprayers, pump, high-pressure cleaners. Look for the Red Coats at the show. This North Carolina company has a complete line of the equipment mentioned above. See the ad on page 14. For additional information from Johnson Manufacturing, check the

THE RED COATS ARE COMING



Look for us at the North Carolina Farm
Materials Handling Exposition
(Booth C14 & C15)

We have a complete line of:
Farm Sprayers
Water Transfer Pump
High Pressure Washers

(For additional information check reader
service coupon on page 2)

JOHNSON MANUFACTURING CO.
PENDLETON, N. C.

appropriate square on the reader service coupon on page 2. Booths C-14 and C-15.

Lead Industries Association, Inc.: Battery-powered vehicles and equipment. Booths A-14, A-15.

Long Manufacturing Company: Leg elevator, augers, bin unloading equipment. Along with other grain-handling and drying equipment, Long will be showing their six- and eight-foot heavy-duty augers. These augers have the hex-line drive shaft which eliminates the long belt drive. The shaft is completely enclosed under auger tube. There is only one short drive belt from power unit to gear box. These augers are fully equipped with fully adjustable motor mounts for use with electric motors. No lubrication is required on any parts. Available in several lengths. For more information, see the ad on page 15 or check the appropriate square on the reader service coupon on page 2. Booths C-22, C-23, C-24.

McGraw Edison: George Pickett, manufacturer's representative, will be showing McGraw Edison heating and cooling systems. Pickett is also your representative for Hagan insulation and for Mamco Corporation air cleaners. See the ad on page 20. For more information, check the reader service coupon on page 2. Booth A-20.

New Idea Farm Equipment Company: Barn cleaner, elevator, silo unloader, bulk feeder attachment. Booth C-52.

Patz Company: Bunk feeder, silo unloader. Booth C-51.

* * *
Pax Distributing Company: Live-stock feeding and watering equipment. Booth C-54.

* * *
The Pearson Company: silo. Booths C-38, C-39.

* * *
Powell Manufacturing Company: Bulk curing and Drying equipment, automatic programming equipment.

* * *
Rawls Pump and Supply Company: Water systems for home, water conditioning equipment for homes. Booth A-13.

* * *
Read Steel Products: Grain and feed wagon. Booth C-18, C-19.

* * *
Red Jacket Manufacturing Company: Water pumps. Booth C-45.

* * *
Revelle Agri-Products: This display will feature Butler's Stor-N-Feed systems—sealed storage for forage and grain (see photo, page 16). An increasing number of live-stock feeders and milk producers are reducing labor and increasing profits by feeding low-moisture silage (LMS) or haylage. Harvested at a greater moisture content than hay to preserve the valuable leaves, LMS offers higher nutrient value and consistently higher protein. Steel sealed storage as in the Butler system plays an important role in LMS because it reduces to a minimum the amount of air that gets into the stored material—a major factor in the spoilage of fermented material. Steel sealed storage reduces the care needed in packing, distributing and sealing the material.

Livestock feeders and dairy operators can now store high-moisture grain safely for less money than ever before. Butler's "oxygen-controlled" Stor-N-Feed structure for high moisture grain offers features identical to those found in the structure for LMS—white finish for high reflectivity, efficient breathing chamber, and all panels are weather-sealed with a nonhardening sealant. Revelle Agri-Products invites you to stop by its booth to inquire about their "big white tank." You will also see displayed equipment and materials on peanut and grain storage, handling and drying. And be sure

(Continued to page 16)

LOOK TO **LONG** FIRST

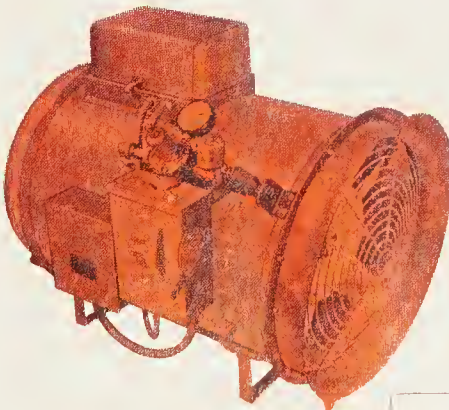
FOR DEPENDABLE LOW-COST GRAIN DRYING, STORAGE & HANDLING EQUIPMENT

AERATION, STORAGE AND DRYING BINS

From 1,000 to 42,000 bu. capacity. Precision formed and punched sections that fit. Rodent tight, weather tight and fire safe. Your lowest cost storage and drying.



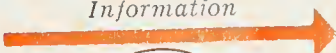
HANDLING EQUIPMENT. Grain augers, distribution heads, leg elevators, screw conveyors, back-up and drive over dump hoppers, spouts and accessories and overhead hydraulic truck hoists.



DRYING FANS AND HEATERS

Full range of standard and high pressure fans up to 40,900 CFM, all controls wired for power connection. Heaters with stainless steel burners, up to 2½ million BTU.

FILL OUT MAIL TODAY
 For Complete
 Information



See Your Dealer
 Displaying This Sign

LONG MANUFACTURING CO., INC. 7116
 P. O. Box 1109 / Tarboro, N. C.

Please send complete information on your full line of Grain Storage, Drying and Handling Equipment.

Name _____
 Address _____
 City & State _____

☐ Farmer ☐ Dealer ☐ Student



Here is a scene from last year's Farm Materials Handling Exposition, held in the William Neal Reynolds Coliseum on the N. C. State campus. Over 20,000 interested farmers attended. This year's show has been moved to the J. S. Dorton Arena at the State Fairgrounds so that the many more exhibitors could be accommodated. Refreshment stands are conveniently located in the Arena so you can come and spend the day.

FLORENCE-MAYO'S NO-PACK NEW PROCESS BULK CURING BARN



MAYO'S NUWAY BARN
(Exterior View)

The greatest improvement in a tobacco barn in 100 years. Used from Florida to Virginia. The most scientific barn and curing system on the market—100% automatic. Economical and saves labor.

Florence-Mayo No-Pack New Process Bulk Curing Barns and Trailer Type Bulk Barns are complete with racks. They are slightly higher in price than the Florence-Mayo Nuway Barn. See the Florence-Mayo Super Jet Oil Curer for conventional barns and all the great improvements in Florence-Mayo equipment for the 1967 season.

FLORENCE-MAYO COMPANY
FARMVILLE, NORTH CAROLINA

Visit us at the N. C. Farm Materials Handling Exposition, State Fairgrounds, Raleigh, N. C., January 18-19, Booths C-12 and C-13.

(Check reader service coupon on page 2 for additional information)

Cost of barn and curing system
\$1,400.
Price includes thermostat,
timer, and programmer.



Electric Farming

(Continued from page 14)

to ask about Butler's economical, unique designed Panl Frame Buildings for your farm needs. See the ad on page 17. For additional information from Revelle, check the reader service coupon on page 2. Booth C-56.

* * *

Southeastern Silo: Silo unloader, auger transmission. Booth C-27.

* * *

Southern Railway System: Special exhibit. Booth A-5.

* * *

System Analyzer Corporation: Display apparatus. Booth A-16.

* * *

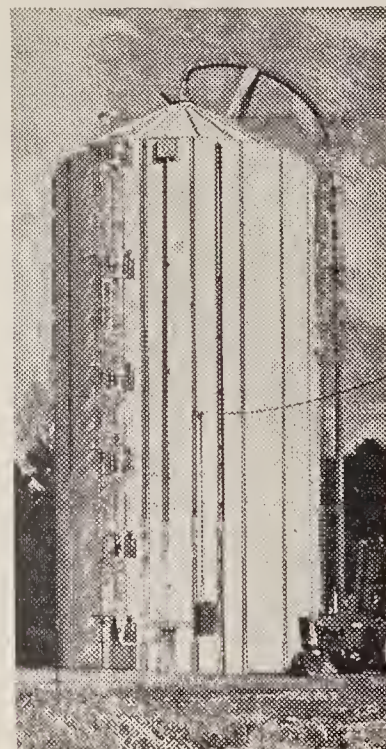
Tri-State Distributors: Badger silo unloader bunk feeder. Booths C-25, C-26.

Vann Industries, Inc.: Automatic tobacco looper, pallet tobacco cropper, conveyor tobacco cropper, bird-proof poultry controlled ventilators. Booths C-1, C-2, C-3, C-4.

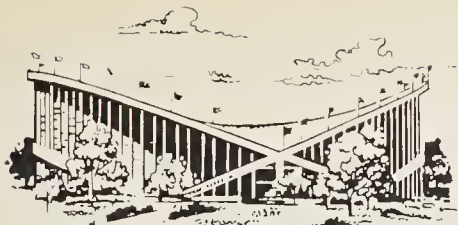
* * *

WinPower Manufacturing Company: Standby generators. Booth A-6.

* * *



Revelle Agri-Products' Butler feeding system.



Electric Farming

Egg Washer, Grader Saves Labor Costs

A new egg washing and grading machine is saving Mr. and Mrs. Robert E. McCoy \$10 a day in labor costs in their poultry and egg operation at Watha in Pender County.

Their egg production is around 50 to 60 crates a week. This is enough to operate the washer about half time, but not enough to warrant use of the grader, according to McCoy. "You have to have the machine checked by the buyer twice a week, but the washing of the eggs is enough to save me \$10 a day," says McCoy. At present, buyers charge about 15 cents a flat (three dozen eggs) for washing.

"Also, when you have your eggs already washed, the quality goes up a little," adds McCoy. "The machine is paying for itself."

McCoy expects the time to arrive shortly when the buyer won't touch unwashed eggs. Then the machine will not only be a money saver, but a necessity to the egg and poultry farmer.

The machine (see photo) takes a flat of eggs through the washing unit and brings them through to the other side where they can be graded and crated.

The grader operates by running the eggs along a small conveyer through a series of counter-weighted rings. When the egg is heavier than the weight, that ring then drops. The balance is delicate and must be checked often to maintain its standard.

—Tom Combs, Four County EMC

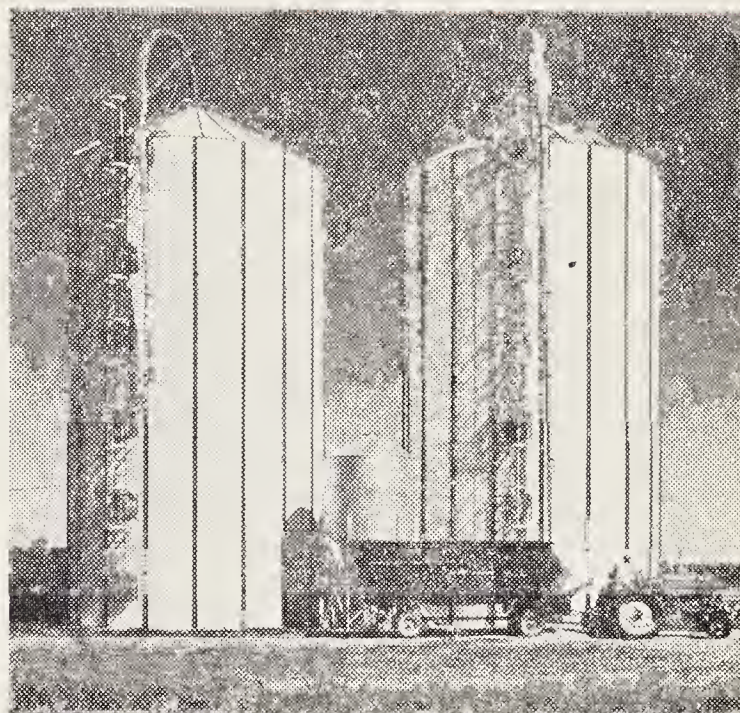


Mrs. R.E. McCoy at the receiving end of the egg washing and grading machine that is saving the McCoy poultry operation \$10 a day in labor costs.

FROM YOUR



Now You Have a Choice!



BUTLER STOR-N-FEED®

Systems for Forage and Grain

If all you get is "the blues" from shopping for a low moisture silage system, take a look at the big, white Butler Stor-N-Feed®

Here's up to 1128 tons of "oxygen-free" storage for corn silage, or 620 tons for low moisture silage—plus Butler's exclusive, maintenance-free breathing system. No breather bags to replace, no relief valves to let air in.

Efficient top unloader is easily serviced. Delivers more silage, faster, than bottom unloaders . . . and with only five horsepower. Bright, white finish reflects heat—minimizes gas expansion.

Price for the Butler Stor-N-Feed® system? You'll be amazed. Thousands of dollars less than some systems. There's an equally efficient and economical system for high moisture grain, too. And Butler offers low-cost deferred payment terms and lease plans.

BUY NOW AND RECEIVE A \$500 CHECK;

SEE US FOR DETAILS

REVELLE

Agri-Products

MURFREESBORO, N.C.

Phone 398-3116

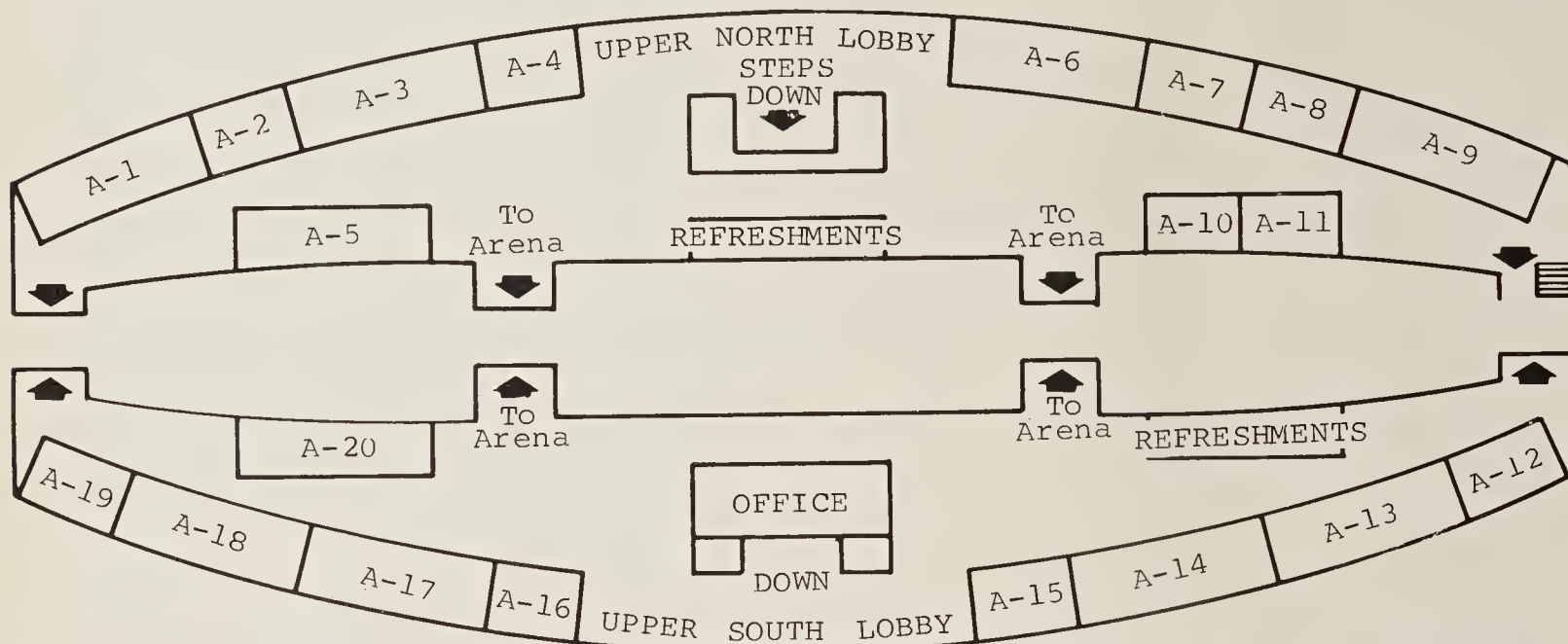
**Look for the Butler trademark
before you buy**

Floor Plan of Dorton Arena, State Fairgrounds

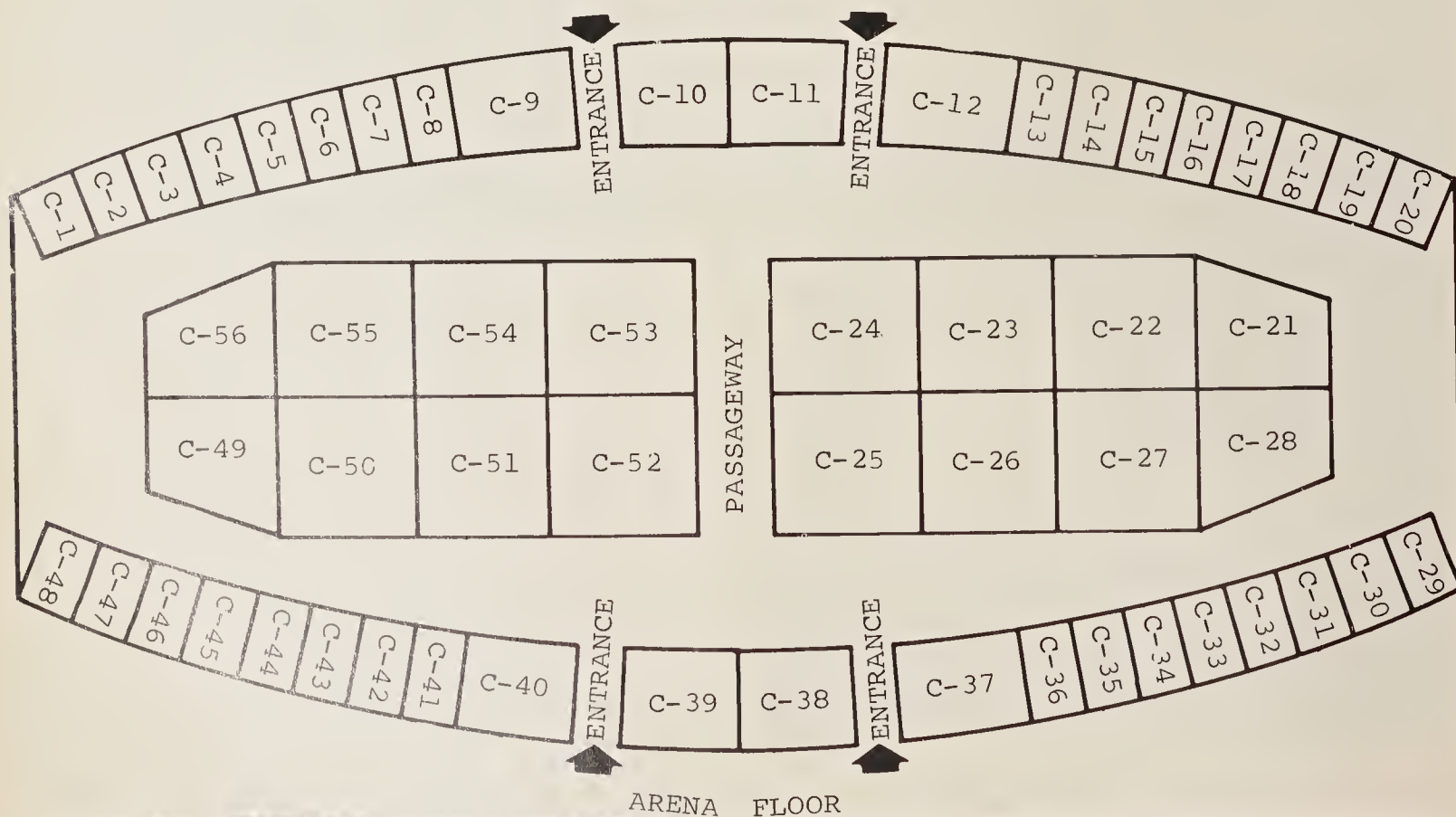
Shown below are the floor plans for the parts of Dorton Arena being used in this year's Farm Materials Handling Exposition. Above is the layout for the upper lobby and below is the plan for the main floor. The lower lobby will not be used for this show. Exhibitor's names, with booth numbers, are listed alphabetically elsewhere in this issue.

UPPER LOBBY

ENTRANCE



MAIN ARENA FLOOR



ARENA FLOOR



Electric Farming

New Concept In Feed Storage

A new concept in feed storage can be viewed at the E. H. Bright farm near Terria Ceia. Bright has installed a silo in which high-moisture grain and silage can be stored for long periods. The silo is sealed so that oxygen—a prime cause of spoilage—can't get at the feed.

With 50 brood sows and some 500 feeder pigs on hand at all times, Bright uses his silo for high-moisture corn storage. The grain is stored with moisture content of 18 to 20 percent. High-moisture grain gives better feed conversion.

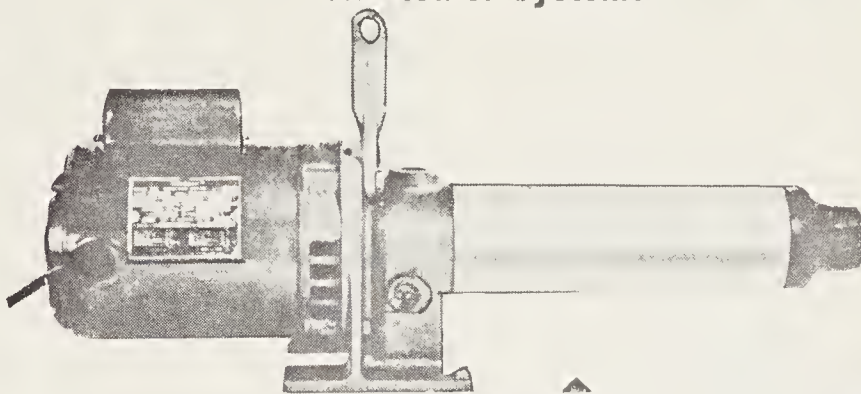
The silo is glass-lined and it has an unloader in the bottom. It can be filled and unloaded without any heavy lifting. The system is more costly to install than others, but drying expense is eliminated.

—Julian Goff, Woodstock EMC



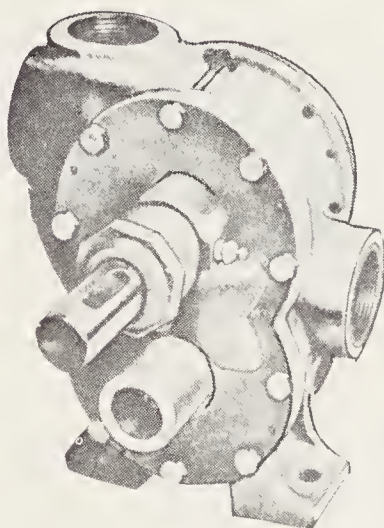
E. H. Bright uses the silo shown in the background to store high-moisture grain used in his swine operation.

THE CAROLINA FARMER'S COMPLETE LINE PUMP SUPPLIER GOULDS PUMPS and Water Systems



Spectacular NEW High-Pressure WATER GUN

Boosts intake pressure by 80 lbs. Use to hose down milk parlors, dozens of clean-up jobs, powerful fire protection.



America's No. 1 POWER TAKE-OFF PUMP

Fits all tractors. Ideal for tobacco seed bed irrigation, other small irrigation projects, low-pressure liquid fertilizing, general farm use.

The farm and home SUBMERSIBLE that outsells 'em all!

Your quietest, most trouble-free source for fresh, pollution-free ground water . . . in any amount you need . . . whenever you need it. Safe, economical.

The handsome PERMA-FLOW

Looks great! Performs great! Most dependable jet water system you can buy. Won't waterlog, lose prime or corrode.

Talk over your
pump problems
with our man in
North Carolina . . .

MAX PRICE



MAX PRICE — GOULDS PUMPS, INC.

P. O. BOX 2752 — CHARLOTTE, N.C. 28201



COME SEE US AT BOOTH C-5 & C-6
FARM MATERIALS HANDLING EXPOSITION

J. S. DORTON ARENA • FAIRGROUNDS • RALEIGH
JANUARY 18-19, 1967





Sells Heating and Cooling Comfort



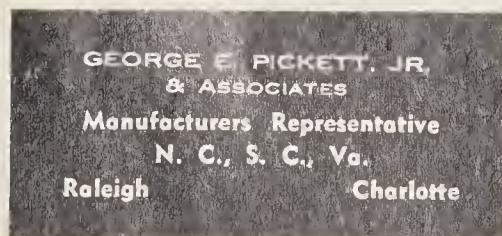
Edison
Electric Heat

Central Air Conditioning



Please Drop By
Our Booth At
The Farm Materials
Handling Exposition.

Booth A-20



Need Help? Flip a Switch

Arnola farms has its own answer to the shortage of farm labor: a flip of a switch.

Arnola is owned and operated by T. J. Arnold and his son, Roy, on Rt. 2, Lexington. They milk a 55-cow herd of Brown Swiss and Holsteins.

The Arnolds started automating their operation a few years ago by installing a silo unloader. Next came an automatic circular feeding system around the silo. Feeding time is now a cinch. A flip of a switch turns on two electric motors and they do the work.

The latest addition to the Arnola operation is a new milking barn. This facility can handle six cows every 15 minutes. A single-six herringbone system is used. The inside walls are of ceramic-covered cement blocks, making it easier to keep the building clean.

The feed mixture that is fed to the cows while they are being milked is stored above the milking barn. Each cow can be given

an exact amount of feed just by turning a dial. The Arnolds custom grind their feed right on the farm.

A refrigerated bulk tank is used to store the milk. Clear glass lines carry the milk from the milkers to the tank. It never has to be handled. When the milk is removed by a tanker truck, an automatic washer cleans the tank thoroughly—again—with the pushing of a button.

Now, says Roy Arnold, he and his father are able to do practically all of the farm work without having to hire any full-time labor. "To get help now," says Roy, "we just flip switches."

And they can flip them in relative comfort. The new milking barn has these added comfort features: a portable TV, a large portable electric heater and an exhaust fan for ventilation.

—Glenn Penninger, Davidson EMC



Electric Farming

STAINLESS STEEL TROUGHS IN

Fairfield **HI 6** STOCK-O-MATIC

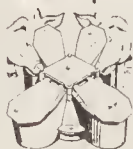


Deliver cleaner
fresher water

SERVE 150 CATTLE

2 King-size 12½" x 18" rust-resistant drinks re-fill as animals drink. "Stowaway" trough covers. Heavily reinforced 32" x 20" cabinet. 2-yr. guarantee on electric heater.

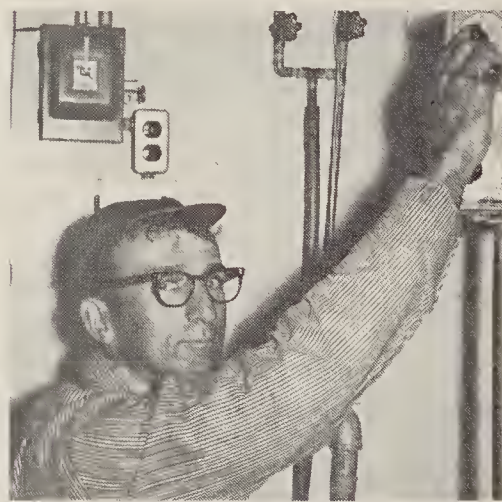
Optional: 2 hog drinks to serve 50 head.
NEW 4-place CLOVERLEAF HOG WATERER



Fresh water flows only when hog touches nose paddle in 1 of 7" x 5" heavy cast iron cups. Cups stay clean, floor dry. Single valve controls flow. Galvanized steel lids. Electric heat.

See these products at
**NORTH CAROLINA FARM
MATERIALS HANDLING
EXPOSITION**

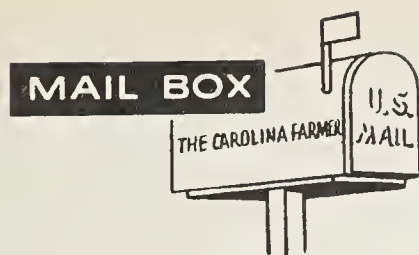
GARBER & MOSELEY, Inc.
RICHMOND, VA. 23223



Roy Arnold selects the proper feed mixture just by turning a dial.



T.J. Arnold and his son, Roy, depend on mechanization in their dairy operation.



DAVID S. WEAVER

This is a tribute to Dr. David S. Weaver, who died Nov. 12.

He was a farmer's man. He taught many of their sons, including me, many basic rudiments of agricultural engineering. Even though born in Ohio, he came to North Carolina and virtually married himself to improvement of the human welfare on North Carolina farms. Often credited with being the "Daddy" of rural electrification which spread throughout the nation, he was always modest in accepting the many honors he received for this magnificent contribution to the joy of living on a farm in North Carolina.

In addition to his contributions to the automation and mechanization of agriculture in North Carolina, he proved himself to be an able administrator as head of the Department of Agricultural Engineering and later as director of the North Carolina Agricultural Extension Service. On numerous occasions he was called upon by various agencies or departments of our federal government to serve on important committees or to act as consultant so that his magnificent knowledge of agriculture and its relation to public affairs could be utilized.

He was never reluctant to accept any task assigned to him and the services he performed endeared him to millions—not limited to the boundaries of our own great State which he helped to make greater.

I am sure that in time history will reveal many more of the worthwhile things he accomplished in those brief 70 years and which space will not allow me to review here. I would like to mention that, at one time, he was high chancellor of the fraternity of Alpha Zeta, one of the highest honorary fraternities with which our students in agriculture can earn membership.

One of the greatest exemplifications of esteem in which he was held by his colleagues, the alumni, and students of North

Carolina State University was shown when he was awarded an honorary degree, an honor richly deserved.

He was an humble man who always greeted you with a smile, quiet and unassuming, an active civic leader, devoted church worker, a great humanitarian and a person who will be remembered in generations to come as we remember him now.

Walter H. Pierce
Professor of Economics
N. C. State University

* * * *

CHARCOALED DOVES

When Mr. Eggleston (N. C. Wildlife Resources Commission) quoted the recipe that I submitted to him for charcoaled doves, he omitted what I consider the secret that gave them their fine taste. After doves have been cleaned, salted and peppered and placed on the grill, in a separate pan mix one stick of margarine, one cup of vinegar and one pod of chopped red pepper. Heat these together until margarine is melted. As the doves cook on the grill, keep them basted with the mixture.

Grady L. Barnes, Supervisor
Eastern Wildlife Management Areas

* * * *

DEER BURGERS?

I learned the tricks of cooking game from my mother and everyone said in her last years she could cook from her bed better than most people could in the kitchen. (She was bedridden the last twelve years of her life, after a number of years in a wheelchair, and directed her cook from her adjoining bedroom.)

My dad has hunted all kinds of game until this year when his legs are too weak. My husband liked coon hunting when he had some good dogs for it. Our two boys enjoy the sport and have brought in quite a number of squirrels. The youngest (now 17) has killed several deer.

I have cooked the meat by old proven ways and tried new ones of my own. You printed my recipe for barbecued vension.

Your recipe for fried squirrel in the November issue is all right, but I'd like to improve on it:

Place whole squirrels in boiling salted water. Cover. As each squirrel becomes tender, lift it out, letting the tougher ones continue cooking. Add water as needed to keep meat covered. When ready to fry, cut up and roll in flour. Fry in medium hot fat until brown. Remove from pan. Sift about three heaping tablespoons flour (more if more gravy is desired) in the hot fat letting brown as you stir. Add hot broth meat was cooked in slowly, stirring to prevent lumping, until proper thickness is attained. Taste broth first; if too salty, add water. Add black pepper. You will find this to be a delicious gravy.

For squirrel pot pie—Instead of making gravy you may use broth to make pot pie. Use your favorite chicken pie recipe, if desirable. Only make up dough and drop the the rolled out squares in the boiling broth and add black pepper. No other seasoning is required.

For deer burgers—Did you know that venison makes very good burgers? We put the strips of meat through our sausage grinder, then freeze in meal-size packages until needed. It can be prepared in any way you would use hamburger. I am told that adding a little beef improves the taste, but have not tried that.

We are served by Roanoke EMC and live three miles from Jackson. Our son Bennie has just returned from four years in the Navy, serving on the U. S. S. Oriskany, aircraft carrier, with several months duty in Vietnam, rather in the South China Sea.

Nancy works with the ESEA project as a secretary.

Richard, who is 17, has not yet decided what he will do. He talks of following his brother's footsteps in the Navy.

We enjoy *The Carolina Farmer*; its timely articles, patterns, recipes, and jokes. But what has happened to the little hen in the cartoon?

Mrs. Millard Gay
Rt. 1, Box 130
Jackson

Our little hen, "Gertrude," was a victim of lack of space in our magazine. But if other readers miss her, we'll try to find a place for her somewhere.

* * * *

PASSING SCENE

HONORED—Broyhill Furniture Industries, in recognition of its new all-electric office and showroom building in Lenoir, with the presentation of a Total Electric Building award by Blue Ridge EMC; bronze plaque was presented to Paul Broyhill, president of the furniture company by Cecil Viverette, general manager of Blue Ridge, which serves the new building, one of the first in the Southeast to use its lighting system as the principle source of heat. (See "The Front Porch" in this month's issue.)



Viverette and Broyhill

DIED—J. T. ("Uncle Tommie") Powers, Rt. 2, Bennett, one of the original incorporators of Randolph EMC and a member of the board of directors of that co-op for 27 years before his retirement last July; on Nov. 4.

DIED—J. M. Andrews, Rt. 1, Red Springs, president and 15-year veteran of the board of directors of Lumbee River EMC; on Nov. 25.

DIED—James Parks, Lexington, construction superintendent of Davidson EMC and member of the

Tarheel Electric Job Training and Safety Committee; on Nov. 25.

ELECTED—To chairman of the board of directors of the newly formed Low-Income Housing Development Corporation, J. C. Brown Jr., executive manager of Tarheel Electric; corporation was launched by the North Carolina Fund, of which Brown is a director, to provide technical assistance and seed money to other organizations wanting to build housing for low- and moderate-income families.

HONORED—As Grange Man and Woman of the Year for 1966 by the N. C. State Grange at its 38th Annual Convention: Dr. H. Brooks James, dean of the School of Agriculture and Life Sciences at N. C. State University at Raleigh, for his leadership in education, research and agriculture; Mrs. V. O. Blalock, retired Person County teacher and civic leader, for her accomplishments in rural education.

HONORED—As Rural Church of the Year, also by the State Grange, Galatia Presbyterian Church, Rt. 4, Fayetteville.

PROMOTED—Robert Partridge, from senior legislative representative to executive assistant to the general manager, National Rural Electric Cooperative Association.

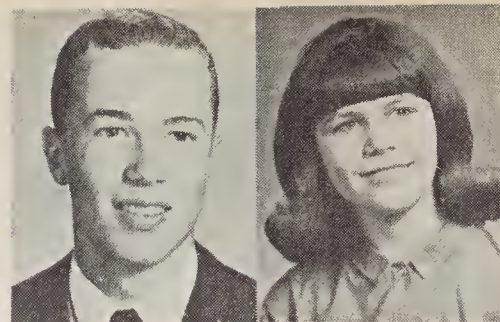
HONORED—As national winners at the 45th National 4-H Club Congress in Chicago in November, the following North Carolina 4-Hers:

—Jack Nesbitt, 17, Rt. 2 Fletcher, awarded a \$500 scholarship in the national 4-H Agriculture program;

—Linda Rumbley, 16, Rt. 1, Burlington, awarded a \$500 scholarship in the national 4-H Bread program;

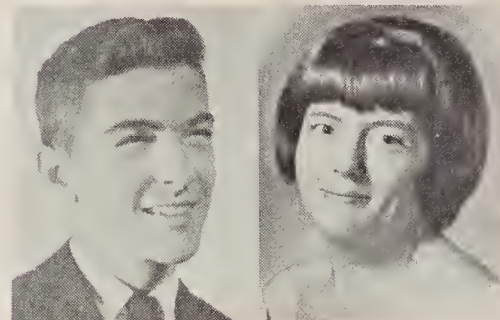
—Ray Ritchie, 18, 1332 Trailwood Dr., Raleigh, awarded a \$500 scholarship in the national 4-H Electric program;

—Gail King, 17, Rt. 1, Willow



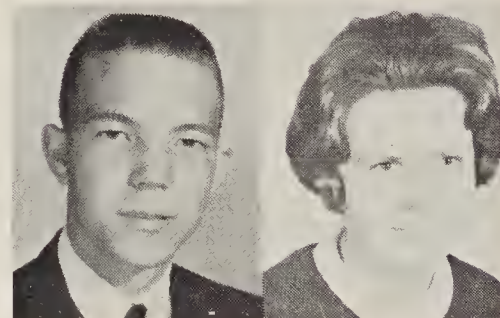
Nesbitt

Rumbley



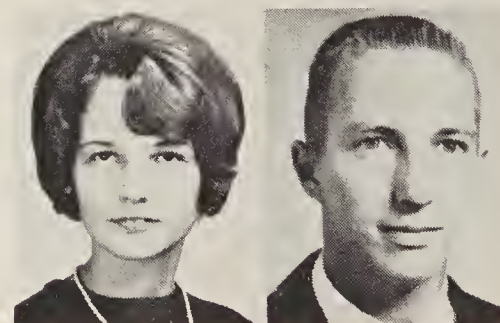
Ritchie

King



Clapp

Cooke



Blanton

Szczerbiak

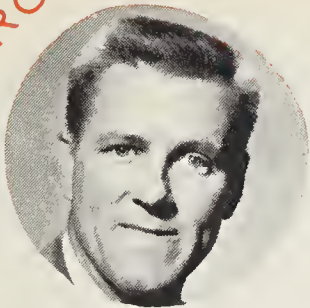
Springs, awarded a \$500 scholarship in the national 4-H Food Preservation program;

—Kenneth Clapp, 18, Rt. 1, Whitsett, awarded a \$500 scholarship in the national 4-H Health program;

—Mary Lois Cooke, 16, Rt. 2, Cleveland, awarded a \$500 scholarship in the national 4-H Horticultural program;

—Sheila Blanton, 18, Sylva, awarded a \$1,000 scholarship in the national 4-H Safety program;

—Steve Szczerbiak, 18, Rt. 1, Castle Hayne, awarded a \$500 scholarship in the national 4-H Tractor program.



Choosing Appliances

The best appliance for your money is not always the one that costs the most, has the most convenience features or has the greatest eye appeal. It is the appliance that will meet your needs and give you years of satisfactory service, that will be used often and to best advantage, and that will be given the care and repairs needed for satisfactory performance and durability that is your best value.

Getting the best appliance for your money is not difficult, Thelma Hinson, extension home management specialist, North Carolina State University, says. Especially, if, before you invest in an appliance—large or small—you decide why you need to buy, which brand and model will serve you best, and where and how to buy.

When thinking about "why buy," Miss Hinson suggests you ask yourself these questions: What purpose will it serve—comfort, convenience, economy, prestige? Will I use it often enough to justify the cost? Could this money be better used elsewhere?

When deciding which brand and model to choose, ask yourself: Is the brand well known with a reputation for satisfactory perform-

ance and durability? Do not mistake a similar sounding name for a well-known brand, Miss Hinson cautions.

Determine what features will be of value to you. Select an appliance that is well constructed from durable materials, convenient to use and adequate size for your needs. Look for easy-to-use features, such as controls that are easy to read and manipulate, movable parts that are easy to remove and replace, and features that are easy-to-care-for.

Decide if a standard model will serve your purpose. The standard model performs the same basic functions the deluxe model does, Miss Hinson notes. The quality, workmanship and materials are usually the same for a manufacturer's product; either standard or deluxe model. The standard model is less expensive to buy and repair and usually costs less to operate. On the other hand, the deluxe model offers more convenience features and eye appeal but costs more to buy, repair and usually to operate.

Check to see if the appliance and cord carry a safety seal. The Underwriters' Laboratory seal indi-

cates the appliance has been tested for safety.

Miss Hinson points out that appliances do not depreciate in value so rapidly as automobiles. If last year's model meets your family's needs in every other respect, you may save money by buying it.

Notice the warranty that comes with the appliance, Miss Hinson adds. Read it. Be sure you understand it.

In determining where to buy, remember that appliances are available from many sources. Shop around. Compare prices and features, the specialist suggests. Ask yourself these questions: Is the dealer well-established and known for his reliability? Does he offer good service? Will he install the appliance? What are the costs of installation?

Another decision you may have to make is how to buy—cash or credit. You will do well to pay cash. However, if you use credit, Miss Hinson suggests, use it wisely. Credit costs most when no down payment is made and the payments are extended over a long period of time, she says. You can save money on credit purchases by making a large down payment and paying off the balance in a short time.

**SOUTHERN ENGINEERING
COMPANY
ARCHITECTS—ENGINEERS
ATLANTA, GEORGIA**

SAW CHAIN

DIRECT TO YOU AT FACTORY PRICES!

Brand new, first quality, fully guaranteed! In .404", 1/2" and 7/16" pitch. Chain for bar of any saw with cutting length of:

12" to 14" \$10.00 15" to 16" \$11.00
17" to 20" \$13.00 21" to 24" \$15.00

GUIDE BARS: New, hard-nose, to fit:

Homelite 17" \$17.00, 21" \$19.00
McCulloch 18" \$18.00, 24" \$21.00

SPROCKETS: Direct-drive sprocket \$4.00,
Gear-drive sprocket \$2.50.

Add 50c to total order for shipping
(For COD send \$2.00 deposit)

Be sure to give saw name, bar cutting length,
and pitch used or number of drive links in chain.
Send check or money order today to:

ZIP-PENN INC. Box 179-ED Erie, Penna.

For big savings on other bars, saw parts,
accessories, write for complete catalog.

SPECIAL OFFER!

Any black and white film,
8 or 12 exposure developed
and printed for only . . .

49¢

(plus 2 names of persons having Cameras)

Name _____ Address _____

Name _____ Address _____

KODACOLOR ROLL

8 Exposure Roll

Enclose \$1.78

12 Exposure Roll

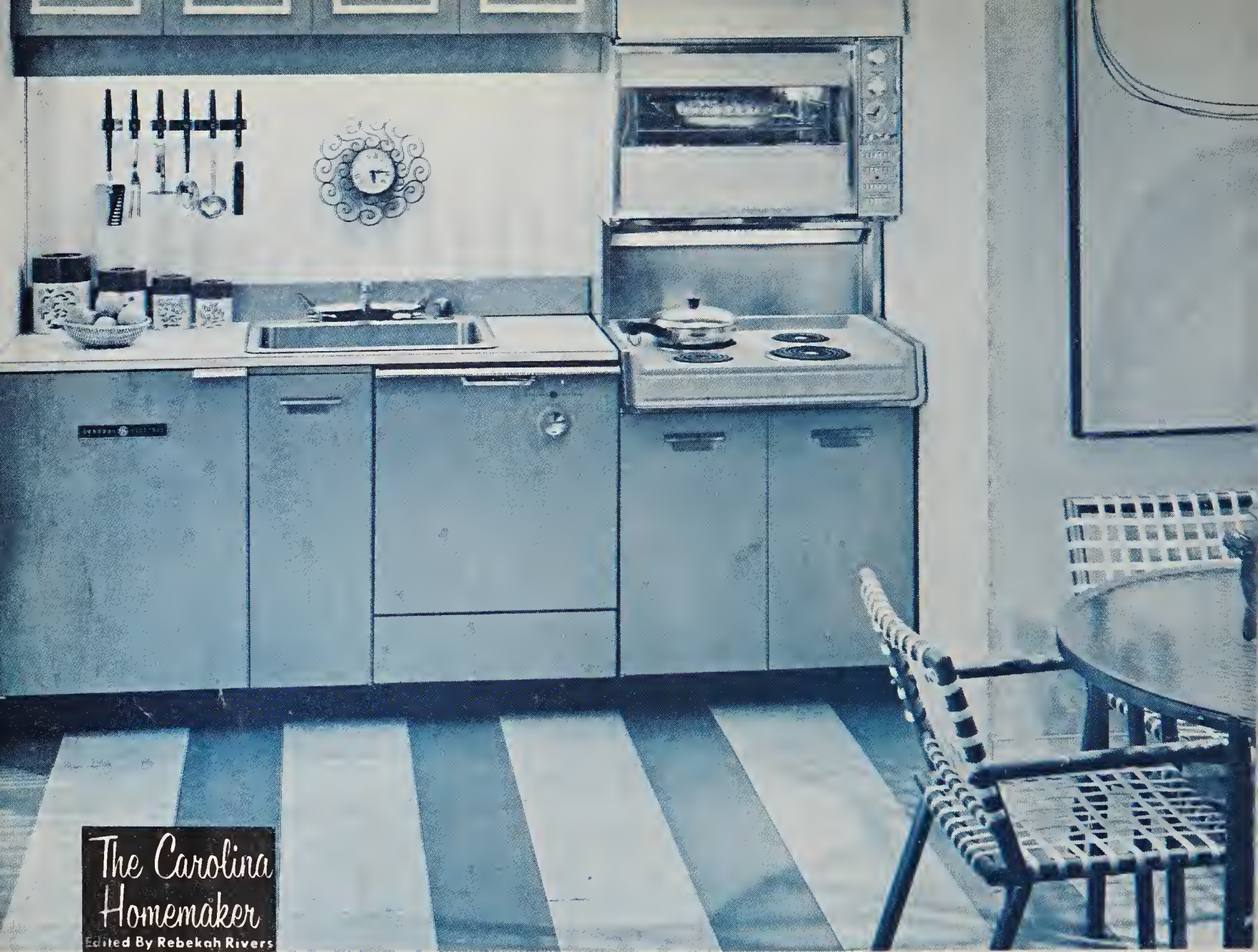
Enclose \$2.25



COLONIAL STUDIO

P. O. Box 3212, Charleston, S. C.

FREE!
COLOR CATALOG
MODERN HOMES
write to:
BOX 1331, VALDOSTA, GEORGIA 31602



*The Carolina
Homemaker*
Edited By Rebekah Rivers



Kitchen Convenience Centers

The kitchen is still the room where the food is stored, the meals prepared, and where dishes and utensils are cleaned afterward.

In a modern kitchen, however, these activities are arranged in "centers" that make tasks easier to perform.

These centers are:

- THE REFRIGERATION AND FOOD PREPARATION CENTER
- THE DISHWASHER AND CLEAN-UP CENTER
- THE RANGE AND SERVING CENTER

For easy flow of work, each of these centers has

its own work counters and storage space for supplies and utensils.

In planning your Kitchen of Convenience, whether it's for a new home or for your present home, lay out your plan, center by center.

REFRIGERATION AND FOOD PREPARATION CENTER

At this center of Kitchen Convenience are the:

- Electric refrigerator
- Food preparation counter
- Storage space for food and utensils

This center, to meet Kitchen Convenience standards, should have four feet of counter space on the lock or latch side of the refrigerator or combination refrigerator-freezer. Below this counter should be four feet of base cabinets; above it should be four feet of wall cabinets.

No space? Solve the problem with an 18-inch counter and base cabinet next to the refrigerator door latch side to set your supplies on. Locate your food preparation center near one of the other centers.

DISHWASHER AND CLEAN-UP CENTER

At this center of Kitchen Convenience are the:

- Electric dishwasher
- Sink with hot and cold water
- Counter space for stacking dishes
- Storage for supplies and equipment

If space permits, for true Kitchen Convenience the dishwasher goes to the left of the sink bowl and the storage cabinets to the right.

If you can't fit a dishwasher into your budget, allow at least 25 inches of space in the base cabinet to the left of the sink for future installation. In the meantime, make sure you have 36 inches of counter space to the right of the sink for stacking dishes to be washed and 30 inches of counter space to the left for stacking clean dishes.

Two feet of counter space above the dishwasher is adequate for unloading clean dishes. Nevertheless, a total of five feet or more of counter space is recommended for this center to achieve true Kitchen Convenience. Wall cabinets above to each side of the sink will supply convenient storage space for everyday dinnerware.

RANGE AND SERVING CENTER

At this center of Kitchen Convenience are the:

- Electric range
- Work counters
- Storage space

In planning convenience in this center, you have a choice of installing a free-standing or a built-in electric range. The built-in range requires more space, but many homemakers prefer it because the oven can be placed at any height. New free-standing ranges, however, are being made with ovens at eye-level height to achieve a built-in appearance.

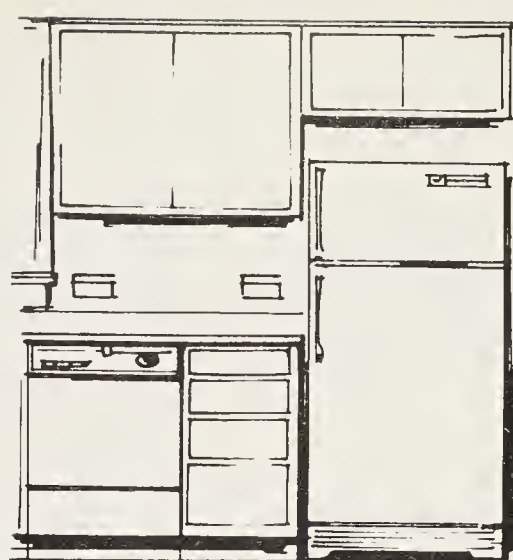
Free-standing ranges require two feet of counter space on each side of the surface units for preparing and serving foods.

Around the range you'll need storage for your portable electric cooking appliances (waffle maker, coffee maker, toaster, and others) and utensils that will be used first at the range. You'll need space for seasonings, sugar, tea, coffee, breakfast cereals, breads, cakes, and cookies, as well as serving trays and dishes.

The built-in range also requires two feet of counter space on each side of the surface units. Beneath the surface unit, however, base cabinets can provide storage space; it should be supplemented by wall cabinets near the surface unit.

The built-in range can be installed in a cabinet and used as a kitchen or room divider, or as an island in the center of the kitchen.

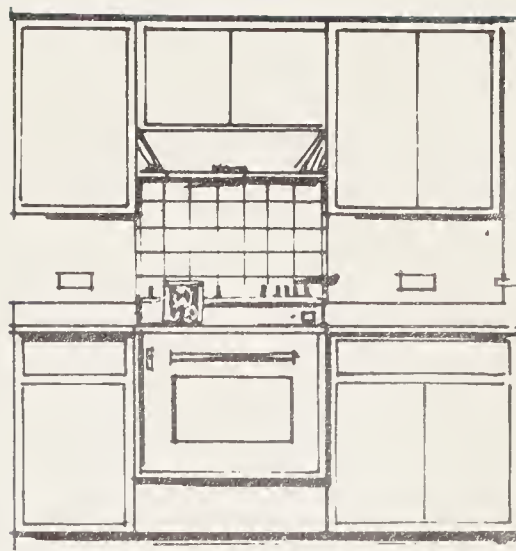
The wall oven, for Kitchen Convenience, is located opposite the Food Preparation Center. It can be combined with any center that is isolated from other centers. Two feet or more of counter space is needed beside this unit. You can have the oven installed at a height to suit your convenience. If the lowest rack is at counter height, hot foods can be more easily removed to the work counter.



The Refrigeration Center



The Cleaning Center



The Cooking Center

Free Patterns



BEAUTY IN BLOOM

You need No. 11 needles for this lovely shell. Pick flower colors to match suits.



POMPON SWEATER

Newest and craziest addition to sweater family. Make in pink, white, yellow, blue.



**RAINBOW-HUED
TURBAN**

Will keep your curls in place or will just keep you warm. Easy to make.



TREND-SETTER

Easy-to-knit beret in combination shades. Wear to side or straight forward.

To:
The Carolina Homemaker
P. O. Box 1699
Raleigh, North Carolina

This pattern offer expires
April 15, 1967

Please send me without charge the pattern instructions I have checked below. I am enclosing a long, stamped, self-addressed envelope.

- | | |
|--|--|
| <input type="checkbox"/> Beauty in Bloom | <input type="checkbox"/> Rainbow-Hued Turban |
| <input type="checkbox"/> Pompon Sweater | <input type="checkbox"/> Trend-Setter |

My Name is: _____

Address: _____

Comment, if Any: _____

The Name of My Electric Co-op is: _____

Family FARE

By ERMA ANGEVINE



After the House Interstate and Foreign Commerce Committee ended its hearings on "truth-in-packaging" and marked up a bill, little truth was left in it.

Lobbyists for food processors and manufacturers succeeded in striking out the bill's provisions to establish standard net contents so homemakers can compare the cost of competing brands or compare the cost of different-sized packages of the same brand.

Veteran Washington columnist Marquis Childs likened the lobbyists' onslaught to that of the doctors' lobby that for years blocked Medicare. The House bill simply calls for plainly and legibly labeled packages. The old fakery of the giant quart, the large pint and the economy size continues.

One Chicago supermarket is fighting this packaging deception in its own way. The Hyde Park Cooperative Society's store is the largest in the city. Like all co-ops, it's owned by its customers. They elect directors, who set the policies, and hire a manager, who runs the store. The co-op has a store committee of members who meet regularly to discuss merchandising, pilfering, and—for the past several years—deceptive packaging.

This year the committee agreed to make it easier for consumers to compare prices. To do so, they shelf-marked 2,000 of the store's 10,000 items with the price-per-ounce. PPO labels went up for detergents, vegetable oil, tuna, peanut butter, paper napkins, rice—the staple products that offer homemakers the biggest handicap in cost comparison.

Committee members figured that if food manufacturers wouldn't package their products in standard net contents, they'd reduce them all to price-per-ounce. At least one supermarket would offer "truth-in-packaging."

Assistant Manager Jan Noble says the co-op may survey its members to determine how many of them changed their buying habits when they knew the price-per-ounce. One thing the co-op's directors know: the scheme excited more interest than anything they've done in several years.

Go All Electric

MIRACLE TOMATO Yields 2 BUSHELS To a Vine

Now—you can grow the world's most amazing Tomato right in your own garden and get 2 to 3 bushels of delicious tomatoes from a vine.

BURGESS CLIMBING TRIP-L-CROP

TOMATO grows 16 to 20 ft. high with huge fruit weighing as much as 2 pounds and measuring 6 in. across. Fine, meaty, solid tomatoes, wonderful flavor. Unexcelled for canning and slicing. Outyields all other known varieties. Grows any place.

Special Offer:
Regular 50¢ Pkt. only **10¢**
3 for 25¢ (Limit 3 Pkts.)

FREE: BURGESS Garden Guide Catalog listing many unusual Seeds, Plants, and Bulbs.

BURGESS SEED & PLANT CO.

100-K Galesburg, Mich. 49053

FRUIT TREES — NUT TREES

Berry Plants, Grape Vines and Landscaping Plant Material. Offered by Virginia's largest growers.

FREE COPY 48-pg. Planting Guide-Catalog in color, on request. Salespeople wanted.

WAYNESBORO NURSERIES

Waynesboro, Virginia 22980

Churches, Groups... MAKE \$80 PROFIT QUICKLY... EASILY

with Happy Home

Feather Dusters

Add big cash profits to your group's treasury with these exciting, fast-selling Feather Dusters. Silicone treated to absorb and hold dust. Washable. You risk nothing when you try this proven fund-raising plan. Your group spends no money—not one penny! Send name, address and name of organization for complete information. Send \$1 for sample Feather Duster... money refunded when you order. Cash in on the big profits today!

SOUTHERN FLAVORING CO., Dept. A-527 Bedford, Va.

RAISE \$50, \$100 ...even \$500

FOR YOUR CLUB OR GROUP

I ship you on credit 200 assorted packages of inspiring Prayer Grace Napkins. Have 10 members sell 20 50¢ packages each. Keep \$50 CASH, send me \$50. Get free samples, details. No obligation.

FREE
samples
sent at
once

ANNA WADE Dept. 692DA, Lynchburg, Va. 24505

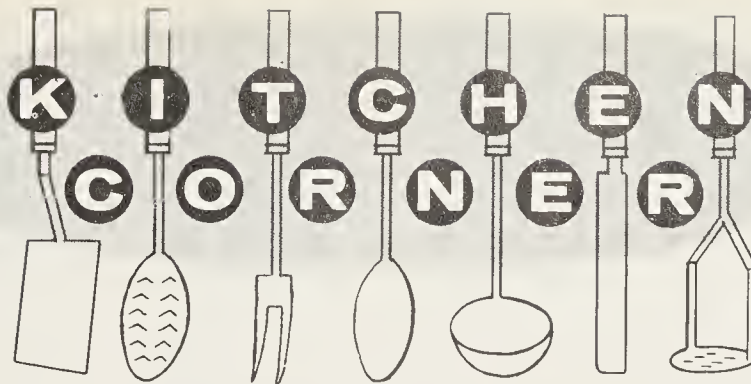
Rush FREE Samples and details of your plan for us to raise \$50, \$100, even \$500, without spending 1¢. No obligation.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Name of Organization _____



Recipe From Early Panelist

Receiving our New Year's recipe was one of the joys one finds in working for a publication through the years—particularly a publication that is owned and published to serve the people. In fact, so joyous was the receipt of this letter, that we just had to choose it for our January kitchen column.

Back in 1957, we began a teen column in *The Carolina Farmer*. In those days, rather than changing the panelists each month, we kept them for a school year. Consequently, we became friends of these wonderful young cooperators. Our cook-of-the-month—then named Patsy Harris—served on our panel in 1958-59. The wisdom of her answers to her fellow teens, her charming visits with us, made her a special favorite. Therefore, it was such a pleasure to have a recent letter from her bringing us up to date on her life since she left her "staff" position on *The Carolina Farmer*.

She has a degree in home economics from the University of North Carolina at Greensboro, but shortly before receiving that degree she married a "high school sweetheart," Franklin McNeill. For two years she taught in South Carolina, but gave up this career for that of professional homemaker. The McNeils have an eight-month-old son. "Happily," she writes, "my time is spent caring for my family and my home."

All of the service and leadership we saw emerging in her as a teen-ager have come to fruition: She's active in the Norwood Baptist Church, she's a 4-H Project Leader, she cooks, sews, golfs, visits neighbors and friends.

The first question she answered in our teen panel was: "How can I make and keep friends?" Her answer: "... follow the Golden Rule. Kindness, loyalty, and honesty are traits which have to be practiced in true friendship. It is a good idea to learn the other person's interest, then get interested in these subjects and activities. Read good books, join worthwhile organizations so that your life can be full and interesting."

Patsy reached her goal and how happy we are for her.

CAROLINA FARMER RECIPE

Submitted by Mrs. Franklin McNeil, Box 656, Norwood, N. C.

1 stick margarine or butter
½ cup shortening
1 cup sugar

2 cups flour
1 egg yolk
1 t. cinnamon or more as desired

Soften margarine and shortening. Combine all ingredients and put in 9" x 13" cookie sheet. (Mixture will be about ¼" thick.) Brush top with beaten egg white. Press in finely chopped nuts if desired. Bake at 325 degrees for about 30 minutes. Cut into squares. Yield: About 3 dozen.

"Gratitude takes three forms: a feeling in the heart, an expression in words, and a giving in return."

It's the month of brand new pages . . . of a few regrets about last year's morrowed ones . . . the month of self-examination . . . the month of promises to one's self, one's family, one's soul. It's the month of happy anticipation of the joys that will come within the new year, and of prayerfulness to bear the burdens that must accompany the joys.

The National Safety Council, has just published a *Family Emergency Almanac*, which should be included in every family library. Write for a copy to: National Safety Council, 425 North Michigan Avenue, Chicago, Illinois, 60611.

DID YOU KNOW THAT the clothes dryer saves the average homemaker twenty work days of eight hours and forty miles of walking in a year?

According to Jon Christensen, Department of Agricultural Information, North Carolina State University, weight is not the only thing to consider in looking slender. Soft fabrics, such as crepe, sheer wools, wool and silk blends, won't give that bulky feeling that you get with heavy textured fabrics. And fabrics in medium shades of color will flatter your skin and hair as well as your figure.

1967 RESOLUTIONS FOR WIVES: (1) Keep a neat, well organized handbag. (2) Have glowing hair. (3) Be on time. (4) Wear a light scent. (5) Smile when hubby comes home in the evening. (6) Give him a small present now and then. (7) Write him notes occasionally. (8) Offer to do small favors. (9) Be friendly with his friends. (10) Don't top his jokes with better ones.

Fashion FAVORITES

9135
SIZES 10-18

4968
2-10

9112
Teen
10-16

4607
SIZES 34-46

4778
SIZES 6-14

4783
SIZES 12½-22½

Pattern No. 4607 is cut in sizes 34, 36, 38, 40, 42, 44 and 46.
 Pattern No. 9135 is cut in sizes 10, 12, 14, 16 and 18.
 Pattern No. 4968 is cut in sizes 2, 4, 6, 8 and 10.
 Pattern No. 4778 is cut in sizes 6, 8, 10, 12 and 14.
 Pattern No. 4783 is cut in sizes 12½, 14½, 16½, 18½, 20½ and 22½.
 Pattern No. 9112 is cut in sizes 10, 12, 14 and 16.

Which Teachers Do Teens Like Best: Young or Old; Man or Woman?

"Whenever a student or a teen says he doesn't like a teacher he usually has a motive, not always a good one. The reason given may be that the teacher is too old, too young and immature, a grouchy old lady, or a mean old man. You can't always make a clear cut definition of what kind of teacher you like best. You must judge a teacher by his ability and what he teaches you. One thing you should always remember is your teacher is devoted to you and education. He would not be in the profession if he were not."

Diane Chelman
Rt. 2, Box 356-D
Lenoir

Diane is in the eleventh grade at Hudson High School. Her parents are members of the Blue Ridge Electric Membership Corporation.



"I feel that whether a teacher is young, old, male or female has nothing at all to do with how well he or she is liked. It depends on his teaching skills, including the ability to control as well as get along with the students, to understand the students, and to be fair and mature in all teacher-student relationships."

Veronica McTottle
Rt. 1, Box 20
Scotland Neck

Veronica is 15 years old and a sophomore at Brawley High School. Her hobbies are drawing, reading, writing and sewing. Her mother, Mrs. Gladys McTottle, is a member of Halifax Electric Membership Corporation.

"I feel it does not matter whether a teacher is old, young; man or woman. What does matter is how the teacher feels toward his work and his students. A teacher who doesn't have any desires or ambitions in what he is teaching or how he teaches isn't likely to make the grade. The teacher who is or acts as though he's looking forward to seeing his students and tries to put things on an equal basis for everyone, most likely is the one who rates highest with teens. In other words, teachers who shows a genuine concern for each student usually have the best relationships with them. I feel most teens, after thinking about this will agree that it's not always the easiest teacher liked best, but it can be the hardest one."

Kaye Harrell
Rt. 1
Faison

Kaye is 16 years old and a junior at Hobbton High School. Her parents, Mr. and Mrs. Raymond Harrell, are members of South River Electric Membership Corporation.



"I like young men teachers better because they are nearer our age, and they understand our problems better than someone older. They explain things in a way which is easier for us to understand. Younger teachers enjoy the same physical activities we do, and men teachers are more able to take part in them."

Diane Brown
Rt. 2, Box 310
Seagrove

Diane is 13 years old and in the eighth grade at Westmoore School. Her parents, Mr. and Mrs. Vester Brown, are members of Randolph Electric Membership Corporation.

Teen



If you have a good answer, send it to **THE TEEN ROUNDTABLE**, The Carolina Farmer, P. O. Box 1699, Raleigh, N. C., at once. Send a photo, too, if you have one, (we can't return it) and a few facts about yourself. Include your parents' name, and the name of the electric membership corporation serving you. If your answer is published, we will send you \$5.

If you want to submit a question, send it along for our statewide panel to answer. For each question used, the sender will get a \$5 check. Jot yours down and send it to us right away.

NEXT QUESTION

"I am new in town and would like to get acquainted with other teen-agers and make new friends. How could I do this?"

This question was submitted by Sandra Ratliff, who will be receiving a check for \$5 from *The Carolina Farmer*. Sandra is a senior at Henry Grove High School. Her parents, Mr. and Mrs. B. J. Ratliff, are members of the Pee Dee Electric Membership Corporation.

Thanks a Lot

As they arrived at a party, a man whispered to his wife, "Your left stocking seam is crooked."

Quickly she made adjustments without being noticed in the crowd. Then she whispered to him. "Is the right one all right?"

"Sure," he said. "It's seamless."

Disguised

The mother put her two children to bed, then proceeded to change into baggy slacks and an old blouse before washing her hair. As she was shampooing, she heard the youngsters getting noisier with each moment. So she stopped, wrapped a towel around her head, and stormed into their bedroom to tell them to go to sleep immediately.

As she left the room, she heard her two-year-old ask his sister in trembling tones: "Who was that?"

Hit or Miss

Game warden: "Say, you're hunting with last year's license."

Hunter: "Yeah, I'm only shooting at the ones I missed last year."

Reason to Hurry

A motorist, charged with speeding through a red light at an intersection, explained to the judge:

"I always hurry through intersections to get out of the way of reckless drivers."



HALE!

For The Record

A beatnik raced up to the psychiatrist at his Army physical and pleaded, "Take me right now! Forget about basic training. Just give me a rifle. Send me to the front. I am power and strength. I am the conqueror!"

Said the doctor: "You're crazy!"

"Write that down, dad," the beatnik urged. "Write that down."

Room for Cleanliness

A newly wed couple has furnished a large house completely with gift-coupons issued with a certain brand of soap. They were proudly showing a friend around.

"But you have only shown us four of the rooms," said the visitor. "What about the other five?"

"Oh!" was the reply, "that's where we keep the soap!"

Later, Please

A tobacco company executive ran across a man, 94 years old, who had been smoking four packs a day since he was 12 years old. The old-timer was in excellent health.

"We are filming some television commercials," he told the old fellow. "If you will let us put your story on film, we'll pay you a thousand dollars."

"Okay, when do you want me?" the old-timer asked.

"Can you be at the television station at nine in the morning?"

"Nope, too early," he replied. "I don't stop coughing until noon."

Overweight

Mother: "I sent my son to buy five pounds of raisins, but you gave him half that amount!"

Grocer: "My scales are accurate. But have you weighed your son?"



"She's upstairs pounding her head against the wall."



"Boss!? It's a little kid look'n for some sheep!"

A story of Progress written by America's Farmers

1917



1967

In 1917 Southern agriculture was in an era of the horse and plow. Long-range financial planning was impossible. However, the nation's farmers continued to meet the challenges of their times, working with determination for a better, stronger America.



Agricultural progress in these 50 years . . . made by dedicated farmers and helped by research and by available capital from the Farm Credit system . . . has resulted in increased productivity, improved quality, and a better standard of living for one and all.



...and the family of Farm Credit Services... salutes agriculture for 50 years of growth!



THE FEDERAL LAND BANK system is proud to dedicate its Fiftieth Anniversary observance to "America's Farmers: Providers of Plenty." We salute Southern farm families for their great contributions to their area and nation.



THE COLUMBIA BANK FOR COOPERATIVES proudly joins the Federal Land Bank system on the occasion of its Golden Anniversary in a salute to agriculture in the South. Our congratulations go to the individual farmers . . . and to the Land Bank system . . . for their achievements.

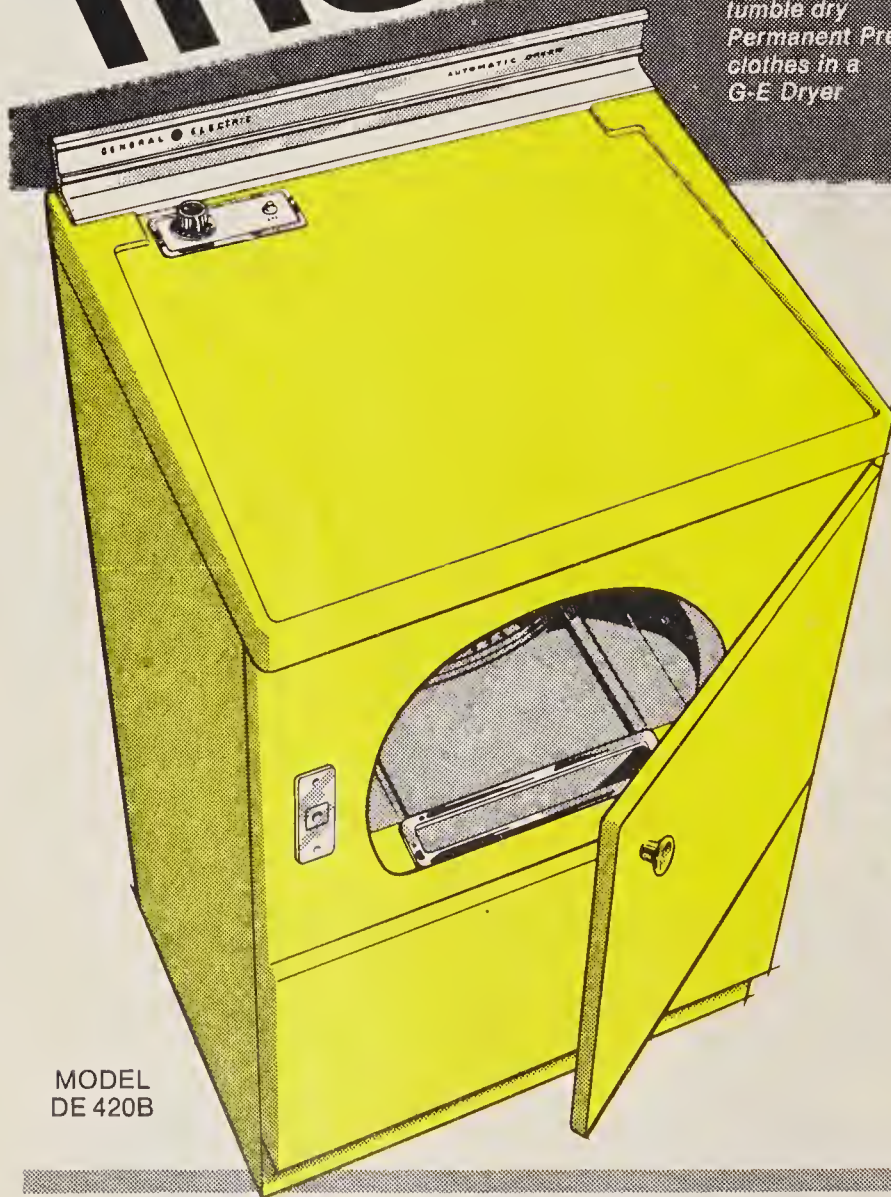


PRODUCTION CREDIT ASSOCIATIONS throughout the South are proud of agricultural progress in the last 50 years. PCA's salute the Land Bank system . . . and the farm families who have helped make Farm Credit Service great!

PRE-SEASON DRYER SALE!

THIS DRYER IRONS!

When you
tumble dry
Permanent Press
clothes in a
G-E Dryer



MODEL
DE 420B

"Sunshine Special"
**AUTOMATIC
DRYER**

\$999⁹⁵*

CHECK THESE DELUXE FEATURES

- ✓ One Dial Fabric Drying
- ✓ High Airflow Drying
- ✓ Fluff Cycle
- ✓ Safety Start Switch
- ✓ Big Capacity Lint Trap
- ✓ Four Way Venting
- ✓ Porcelain Enamel Top & Clothes Basket
- ✓ 110 or 240-Volt Operation
- ✓ Large Loading Port

* Distributors Suggested Special Price

SEE YOUR NEAREST G-E DEALER

Walker Martin, Inc. — Authorized Distributors: Raleigh, Charlotte, Greensboro, Asheville